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RUSSIA'S
PRODUCTIVE SYSTEM

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INTRODUCTION

It is now thirteen years since the Bolsheviks seized power in Russia. They brought about a complete change in the structure of society, establishing a new form of government and new social relationships. It is impossible to draw a sharp line of division between the political and social changes and the changes which were made in the system of production and distribution : the new organisation of industry depends on the political and social changes, and could not have been created without them. But this book is not a study of the political and social system which now exists in the Soviet Union : it is an attempt to describe the new economic organisation—the organisation through which the production and distribution of food, raw materials and finished goods is carried on day by day.

This organisation is necessarily complex. Production under modern conditions requires a vast system of specialisation and co-ordination even within a single factory. The links of interdependence run from factory to factory, from one district to another, from one country to the bounds of the earth. But it was not always so. The links have been created by human beings, and from time to time they are altered or broken by human beings. The development of synthetic fertilisers may completely destroy the intricate system of production, transport and finance which grew up around the nitrate trade. The discovery of easily won tin in Malaya may set up new links which take the place of those which bound South

Wales with Cornwall. The creation of a vast combine may destroy hundreds of weak connections and replace them with a single chain. And again, war may suddenly isolate one country's industry from another's, and force each back upon its own resources. Nothing is fixed and unalterable—not even the productive system itself.

In Russia the productive system has changed. The forms of organisation are not the same as they were in Tsarist Russia or as they are still in other countries. But the change did not take place in a single night ; the building up of the new organisation has been a lengthy process—a process which is still incomplete. The central aim of the whole process has been to establish a planned system of production and distribution which will make possible a steady improvement in the material and social conditions of the people. A study of the new system therefore resolves itself into a study of the growth of planning and of the organisational forms which make it possible to prepare and to carry out the plan of production and distribution.

At first sight, every immense organisation seems unspeakably complicated. The forms of organisation within each industry in the Soviet Union, the centralising authorities and the relations between one unit and another, are undoubtedly confusing. But the fact that they seem to us so difficult to follow is largely due to the fact that no serious attempt has been made to study the organisation of industry in our own country. The organisation of the coal industry in the Soviet Union is intricate ; there are many units and a hierarchy of controlling bodies ; but it is simplicity itself compared with the organisation of the coal industry in Britain, as anyone will realise who attempts to study the reports of the various Royal Commissions on the Coal Industry. In fact, the special feature of the organisation of Soviet industry is its

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relative uniformity and the linking together of every unit in a single scheme. That the scheme is complex is due to the nature of modern industry ; but even the most complex scheme is easier to understand than a conglomeration of units which lack any but the most casual relations either with each other or with any central authority.

In the growth of the new system of production and distribution in the Soviet Union it is necessary to follow the conflict of two principles of organisation which are formally contradictory but not in essence irreconcilable. The first is centralisation, some degree of which is vital to any planned productive system ; the second, decentralisation, is almost as vital to production itself. The dialectic which has to be followed leads from centralisation to decentralisation and on to the synthesis—the co-ordination of autonomous units.

The starting-point of the process was the creation of a central controlling authority for the economic life of Soviet Russia, and the subordination of the productive units—the mines and factories—to its control. The second stage was the organisation of the productive units into groups working on an autonomous basis. These stages are described in the earlier chapters, and the following chapters deal with the present stage, in which the autonomous units are working with a high degree of co-ordination.

The new organisation and the system of planned production and distribution have already achieved remarkable results. Industrial production in the Soviet Union is rising steadily year after year and at a rate unknown in any other country. In a world shattered by successive economic crises this fact alone makes the study of the organisation which is obtaining such results one of absorbing interest.

The study of the industrial organisation must, however,

be preceded by a brief account of the Soviet Union itself, and of the relations between its component parts. This is all the more necessary because of the close connection between the State and industry, which involves an industrial organisation closely parallel to the organisation of the States forming the Soviet Union. The Soviet Union—the Union of Socialist Soviet Republics—was formed in December 1922 on the basis of a Treaty of Union between four of the separate States which had arisen since the Revolution of 1917 : the Russian Socialist Federation of Soviet Republics (R.S.F.S.R.), the Ukrainian Socialist Soviet Republic, the White Russia Socialist Soviet Republic, and the Transcaucasian Federation of Socialist Soviet Republics. The Socialist Soviet Republics of Uzbekistan and Turkmenistan in Central Asia subsequently joined the Union. It will be noted that two of the constituent States are themselves Federations of Republics ; and within the Republics there are many autonomous areas based on national groupings.

The Soviet Union, however, is not a loose Federation but a closely knit unit, within which certain administrative and legislative functions are carried out by " All-Union " bodies, and others by the governing bodies of the constituent Federations or Republics, while there are also separate governments, with narrower functions, in each of the smaller Republics and autonomous areas. Supreme authority lies with the Union Congress of Soviets, composed of some fifteen hundred delegates elected, on an indirect basis, from all parts of the Union in proportion to population. The Union Congress of Soviets elects the Union Council of four hundred members from among the delegates of the allied Republics in proportion to the population of each Republic. This Union Council and

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the Council of Nationalities—a “second house” of about 130 members representing the separate Republics and autonomous areas—together constitute the Union Central Executive Committee, which meets several times a year and adopts legislation or confirms decrees issued by the Union Government.

The permanent governing body is the Union Council of People's Commissaries, which is elected by the Central Executive Committee; apart from the Chairman and Vice-Chairman, each of the People's Commissaries is in charge of a department carrying out administrative work for the Union as a whole. Some of these departments, such as the Commissariats for Foreign Affairs, Army and Navy, and Transport, operate throughout the whole territory of the Soviet Union as the sole authorities in their sphere of work; other Union Commissariats, such as those for Labour and Finance, and the Supreme Economic Council, work chiefly as co-ordinating organs, with similar Commissariats in the separate Republics looking after the appropriate sphere of work within each Republic. The heads of these “Commissariats of the Republics,” who form the Council of People's Commissaries or actual government of each Republic, are elected by the Central Executive Committee of each separate Republic, the Central Executive Committee being elected in turn by a Congress of Soviets for each Republic or Federation.

So far as State industry is concerned, some important industries (such as oil, coal, metals) are regarded as “of All-Union importance,” and are directly controlled by the Supreme Economic Council of the Soviet Union. But the smaller enterprises, and, generally speaking, those whose supplies and markets are limited to the area of a single Republic, are controlled by the Economic Council

of that Republic, acting in independence of the Supreme Economic Council of the Soviet Union. It has been necessary to confine this book (except for occasional references) to the State industries which are "of All-Union importance," and the central apparatus described is the central apparatus of the Soviet Union. This gives a clearer picture of the organisation of industry ; moreover, a detailed study of the minor industries within each of the constituent Republics would merely repeat much of the ground already covered in describing the Union organisation, as the forms adopted by the Union have also in fact been adopted by the constituent Republics. A brief description has, however, been given of communal industry—the enterprises carried on by the Town Soviets—owing to its special character.

The whole study is necessarily incomplete. The subject is vast, and selection is unavoidable. The materials used are mainly official reports, decrees and statutes of organisations, together with books written by Soviet economists and the active organisers of Soviet industry and agriculture. Numerous articles in the Soviet Press have also been consulted, and personal enquiries have helped to clear up doubtful points. Every source that has been consulted confirms the impression of an organisation which is still in course of development, still vigorous enough not to fear trial and error, the scrapping of obsolete forms and the constant search for new forms. But the reorganisation which was carried out in the first half of 1930 marks the point at which the system of planned production and distribution has begun to work with a high degree of efficiency, and the main features of the new organisation are therefore likely to remain unchanged for a considerable period.

CHAPTER I

THE CHANGE OF OWNERSHIP

The revolutionary events of November 1917, both in Leningrad and throughout Russia, brought no immediate change in the private ownership of land or factories or other forms of property. The slogans of "Peace, Bread, and Land" rallied the armed forces, the town workers, the peasants, and the agricultural workers to support the change of State power—"All Power to the Soviets!" But there was no immediate expropriation of the propertied classes. From the very outset the reorganisation of industry was conceived as a long and gradual process, in the first stages of which the essential features would be co-ordination and control by the State without any transfer to it of actual ownership or management. The economic plan on which the Soviet Government was to work had been formulated by Lenin in his place of refuge in Finland. Writing to the Bolshevik organisation in Leningrad in October 1917, Lenin emphasised the existing disorganisation of production and railway transport and distribution generally, with its menace of famine and catastrophe for Russia; and he urged that this menace could be averted only by energetic measures of centralisation and control. This principle, he pointed out, had been established in all belligerent countries:

"Crushed by the cost and the scourge of the war, more or less the prey to disorganisation and famine,

each of the belligerent States has long since decided upon, experimented with and applied a whole series of measures of control which almost all involve the organisation of the population, the creation or encouragement of organisations of different kinds with the participation and supervision of the representatives of the government."

Tsarism, he argued, had also set up Committees for the War Industries, but had restricted their activities in order that they might not interfere with the interests of the propertied classes, and only a revolutionary government would break down the artificial barriers which placed the interests of private property before the interests of the people. Such a revolutionary government

"has only to decree, in the very first week of its existence, the application of the essential measures of control, to establish effective sanctions against the capitalists who attempt evasion, and to invite the population itself to supervise them and see to it that they are compelled to carry out the provisions of the law."

These essential measures were defined as the nationalisation of the banks, the nationalisation of the trusts, the suppression of business secrecy, the obligation on all merchants and industrialists to group themselves into trusts, and the organisation of the population into consumers' societies controlled by the State. Lenin made it clear, however, that no immediate change in the existing system of private property was contemplated. In explaining the proposed nationalisation of the banks he wrote :

“ Only the merging of all banks in one—in no way modifying property relationships by this step and taking away from no one, we repeat, the tiniest portion of his property—makes effective control possible.”

Expropriation would only be applied as a penal measure against those who tried to sabotage the process of nationalisation :

“ Directors, administrators and big shareholders who tried to protract the business and to conceal documents and abstracts of accounts should be imprisoned and their property confiscated.”

The abolition of business secrecy and the compulsory grouping of enterprises into trusts were further measures to facilitate centralisation and control, without any immediate change of ownership—“ this grouping into a trust in no way changes the system of property.” The essential feature of all these measures was to be the building up of centralised control over production and distribution ; but the control was to be exercised through and with the aid of the workers and technicians in each enterprise. The oil industry, for example,

“ is already technically and socially organised, and efficiently run, by hundreds and thousands of clerks and engineers, etc. . . . Bureaucratic control, obviously, will yield no result in this case. . . . It is necessary to appeal directly to the initiative of the workers and clerks.”

It is perfectly clear from this letter that Lenin conceived the seizure of State power as a step necessary to provide the basis for centralised organisation and control of industry,

but hoped to achieve this without any immediate interference on a general scale with the existing system of private property. In all cases of nationalisation, "the directors and officials themselves would be responsible for carrying it out," and expropriation would be applied only as a measure of punishment against those who refused to carry on production under the new conditions. The immediate and urgent need was co-ordination, not expropriation.

But in fact, even before the November revolution, the system of private property had been weakened and even broken at many points. The economic crisis which had been the immediate cause of the deposition of the Tsar and the formation of the Provisional Government in March had continued and deepened throughout the summer. Food, fuel and raw materials could only be obtained in small quantities and irregularly ; and many factory owners had suspended production, partly to cut their losses and partly to resist the demands of the workers for higher wages and improved conditions. In many cases owners and managers had simply collected all available movable property and fled from the factories. In other cases, owners who had sabotaged production or had come into conflict with the workers had been ejected. In *Ten Days that Shook the World* John Reed wrote :

" I know of certain coal-mines near Kharkov which were fired and flooded by their owners, of textile factories at Moscow whose engineers put the machinery out of order when they left, of railroad officials caught by the workers in the act of crippling locomotives." (p. 7).

In such cases there would be no formal change of ownership, but in fact the particular enterprise concerned

would be run, so far as supplies were available, by the workers themselves, as a rule through a committee elected at a mass meeting of the workers. It is impossible to tell how far these processes—voluntary abandonment of enterprises by their owners, and the forcible taking over of factories by the workers when sabotage was encountered—had gone by the time of the November revolution. But it is certain that the seizure of power by the Bolsheviks, and the rapid strengthening of the local Soviets in every part of the country, rapidly accelerated both processes in the weeks that followed the revolution. The taking over of the factories by the workers was anarchic, unplanned and even undesired by the Soviet Government, which for a long period did everything in its power to stop it. There are many stories of deputations from factories to Lenin, urging that their particular factory should be taken over, and of his putting searching questions, the effect of which was to show that the workers were quite unaware of the difficulties they would encounter. He would then tell them to go back and begin to study where the fuel and raw materials were obtained, how the process of production was organised, and where and how the products were sold ; and, after they had satisfied themselves on these points, to come back and inform him that they were then ready to carry on production. But in fact events did not wait for the development of knowledge and training among the workers. Expropriations were carried out by the local Soviets and by the workers themselves with a view to meeting some urgent local demand or breaking up some counter-revolutionary plot. And, apart from the struggle between the workers and owners of particular factories, the wider struggle against the Tsarist elements within the country and against foreign intervention brought fresh complications, and made it essential

to hasten the process of reorganisation and to undertake expropriations on a scale which had not been foreseen in Lenin's programme.

The various stages in the formal change of ownership were marked by decrees issued by the Soviet Government. The first two, issued on November 7th and 8th, 1917, transferred all State property (including the railways) to the people, and abolished the private ownership of land, handing over the large estates to local Land Committees and District Soviets. The nationalisation of banks followed (decree of December 14th, 1917) ; shipping was nationalised in January 1918 ; concerns dealing with foreign trade were nationalised in April 1918 ; but the first general nationalisation of large-scale industry took place only under the decree of June 28th, 1918 ; and the final decree nationalising smaller industrial concerns was issued only on November 29th, 1920. The decree of June 28th, 1918, nationalised all large enterprises with a capital of at least a million roubles—roughly equivalent to £100,000 ; but the decree made it compulsory for the owners of such concerns to remain in control and continue production until such time as the government could set up its own machinery, and the owners were even allowed to retain profits made—if indeed any were to be made at that period. It was not until 1919 that the former owners were generally replaced by State managers. The decree of November 1920 nationalised smaller industrial concerns, employing not less than five workers where machinery was used, and not less than ten workers where there was no machinery.

It is clear that these decrees were, in substance, merely legalising and generalising expropriations which had already taken place. A resolution passed by the first All-Russian Congress of Economic Councils in May 1918—a resolution which prepared the way for the general

nationalisation of large-scale industry decreed at the end of the following month—says :

“ . . . from the nationalisation of separate enterprises (of which 304 have now been nationalised and sequestered) it is necessary to go forward to the systematic nationalisation of branches of industry. . . . The carrying through of nationalisation must not be sporadic. Nationalisation must only be applied by the Supreme Economic Council or the Council of People's Commissaries with the consent of the Supreme Economic Council.”

In its report to the Eighth Congress of Soviets (November 1920) the Supreme Economic Council recorded that 4,547 enterprises, employing 1,100,000 workers, had been nationalised ; shortly after this report was issued there came the decree of November 29th, 1920, nationalising smaller concerns with five or ten workers. But when, in the following year, the industrial census taken on August 28th, 1920, became available, it appeared that on that date there were no less than 37,000 State industrial enterprises, employing close on two million workers, and fourteen per cent. of these nationalised “ enterprises ” employed only one hired worker !

The actual process of the change of ownership, therefore, developed to a great extent independently of the theories or desires of the central authority ; and in any study of the new productive system which was being built up this fact must be borne in mind. It can easily be imagined that in such circumstances the administration of the nationalised industries was in a perpetual state of flux, and that there were the widest variations in practice even when general rules had been formulated. And these general

rules themselves were not evolved arbitrarily ; the whole system of management and control of industry after the November 1917 revolution was itself conditioned by events which had already taken place before November, or by developments which were not " according to plan."

Before November 1917 the control and management of industry had already been subjected to " interference " from two directions. The Committees for the War Industries which had been established under the Tsardom still functioned under the Provisional Government, and they possessed a rudimentary central apparatus with a rudimentary local apparatus in the chief industrial centres. But the whole machinery of co-ordination, even as applied to essential war materials, was extremely weak and ineffective, and corruption at every stage flourished on the very disorganisation which it was the function of the war committees to remove. At the best, these committees carried out little more than statistical work ; but, however primitive their apparatus and however weak their functioning, they did at least provide the first basis for the future co-ordination of industry, and were made use of after the November revolution both by the Soviet Government and by the local Soviets.

The second and incomparably more real interference with the private control and management of industry had come from the workers. In March 1917, immediately after the expulsion of the Tsar and the formation of the Provisional Government, the workers in every large industrial concern in Russia had elected factory committees to represent their economic and political interests. These factory committees, from the start and throughout the summer of 1917, were in constant conflict with the management of their particular factory, and often with the government authority itself. At that time trade unions

were practically non-existent in industry generally, and the factory committees were organisations formed spontaneously by the workers in order to secure wage increases and other improved conditions. In the larger centres, where political consciousness was highly developed, the factory committees sent forward delegates to the Town Soviets, which were beginning to exercise considerable political and economic influence. Thus, particularly in the larger centres, the factory committees became the expression of the workers' organised power ; starting with demands for wage increases made necessary by the economic crisis, they rapidly developed wider aims, and passed from negotiations with the management to attempting to exercise control over the management, and in many cases they even took over the running of the factory.

In the conditions prevailing in the spring and early summer of 1917, wage increases and the shortening of hours and improved conditions generally were easily won ; but there were two factors which made it impossible for relations with the owners to be maintained on a relatively peaceful basis : the attitude of individual directors and managers, and the general economic situation. In the management of Russian industry the general attitude of Tsardom to the workers was still fully reflected ; there was the same contempt and indifference towards the elementary needs of the workers, and the same arbitrary brutality in the treatment of individuals. There were many old scores to be settled, and many new conflicts arose in the process of abolishing abuses at particular factories. In such cases the factory committees would insist on the removal of individual directors or managers, and resistance to their demands would result in a struggle culminating in the abandonment of the factory by the owners or in

their forcible ejection. In either case the factory committee would assume control, putting in either a small committee or one of the technical staff to run the factory. It must be said, however, that such cases, although numerous, were exceptional, taking Russian industry as a whole. In the vast majority of cases the owners or managers more or less grudgingly accepted the fact that concessions were inevitable, and the form of management remained unchanged.

But the general economic situation soon brought new issues to the front. Difficulties in obtaining food, fuel and raw materials, and the consequent general rise of prices, brought sharply before both the workers and the owners the question of how production was to be carried on from day to day. Factories closed down because they could not obtain fuel or raw materials, or because the transport of their products to a market was impossible or uncertain, or because the sale of their products at a profit was extremely problematical. Immediately the factory committee would raise questions : was it true that there was no possibility of obtaining fuel or raw material ; could the sale of products be really impossible, in view of the universal shortage ? Was the owner too greedy, or—was he deliberately sabotaging production as a means of fighting the growing power of the workers ? John Reed mentions one instance brought forward at the meeting of the Leningrad Soviet on October 31st, 1917 :

“ A machinist from the Putilov works described how the superintendents were closing down the departments one by one on the pretext that there was no fuel or raw materials. The Factory-Shop Committee, he declared, had discovered huge hidden supplies. ‘ It is a *provocatzia*,’ said he. ‘ They want to starve us—or drive us to violence ! ’ ”

As early as June 20th, 1917, the Moscow Provincial Committee of Workers' and Soldiers' Deputies demanded the acceptance by the employers and the government of the demands (1) that work should not be stopped at any factory at which supplies of fuel and raw material were available, and (2) that the final decision of whether any particular factory was or was not to be closed should be made by the workers engaged in the factory in question, together with representatives of the government and the Moscow Soviet. This shows the close connection between the individual factory committee and the Soviet expressing the political attitude of the workers to the economic crisis.

The very raising of such questions by factory committees or local Soviets involved an attack on the existing order of "managerial functions." It led inevitably to demands to examine the books and records of particular concerns, to the independent investigation by the factory committees of stocks, sources of supply and markets. Apart from the extreme cases where, as a result of such investigation, the owners or managers were simply ejected, the factory committees generally had begun to exercise a considerable amount of control on the management even before November 1917. The managerial functions exercised by the factory committees were of course fluctuating from day to day, and sometimes ranged far beyond the confines of the factory. But in general they were functions of control: examining records and accounts, and insisting on efforts being made to carry on production. In extreme cases, the managerial functions of a particular factory committee might extend to forced exchanges of goods, or even requisitions of food, fuel and raw materials to meet an urgent economic necessity. There was no standardised form of control: the limits were set by the determination of the particular factory committee.

RUSSIA'S PRODUCTIVE SYSTEM

It was on these foundations—the war industries committees and the factory committees—that the Soviet Government had to build the machinery of co-ordination and control which was essential to save Russia from complete economic collapse. The first step was the setting up of the Supreme Economic Council, by a decree of December 1st, 1917. This Council was charged with the organisation of Soviet Russia's industry and finance, and the co-ordination on a definite plan of all existing economic organisations ; and with the utilisation of the existing workers' organisations—the trade unions and factory committees—in the actual control of production. The Supreme Economic Council was at first composed of representatives from all the People's Commissariats and from the All-Russian Council of Labour Control (itself representing the trade unions and factory committees) ; but in the course of the following year, when the Provincial Economic Councils had begun to function effectively and the trade union organisation had incorporated the factory committees in its machinery, the composition of the Supreme Economic Council was altered to :

- 10 members of the All-Russian Central Executive Committee (the central political organisation, elected by the All-Russian Congress of Soviets).
- 31 members of the Central Trade Union Council.
- 20 representatives of Provincial Economic Councils.
- 2 representatives of the Co-operative organisation.
- 5 representatives of People's Commissariats directly concerned in industry—Food, Transport, Labour, Agriculture and Trade.

By 1919 further changes had been made in its composition, the most important of which was the substitution of the

heads of Departments for the representatives of Provincial Economic Councils. By 1920 the whole conception of a great Council in almost continuous session had changed, and the working out of detailed plans was left to the various Departments under the supervision of the presidium of the Council, general policy and directives being laid down by the periodic Congresses of Economic Councils.

The changes in the composition of the Supreme Economic Council were of little importance compared with the development of the Council's organisation. The first work of the Council was the formation of several Departments, each under a "collegium" or Board of seven or nine persons, to deal with the various branches of industry. Where, as was the case with fuel, transport, metals and engineering, a "war industry committee" was already in existence, its machinery was taken over and formed the basis of the corresponding Department of the Supreme Economic Council, while the local war industry committees formed the basis of the local organisation of these Departments. The Board of the Department was appointed by the Supreme Economic Council and in all cases the appropriate trade union for the industry was represented. In industries where no form of centralising machinery existed, the Supreme Economic Council had to build the corresponding Department out of nothing, and both the central and local organisation had to develop piecemeal.

From the very nature of things, the first work of the Supreme Economic Council's Departments was both formal—registration and statistics—and actual—the appointment or confirmation of managers and the organisation of production and distribution. They had to control directly those enterprises which had already been taken

over by the workers ; and they had also to function as directing Boards for whole branches of industry in which most of the enterprises were still in private hands. And, above all, they had to ensure that the instructions sent out by them were observed, both in the State-controlled enterprises and in those which were still in the possession of their owners. Parallel with the organisation of Departments at the centre, therefore, the local organisations of control had to be built up. The first general step taken in this direction was to instruct the factory committees to elect special control commissions, to which the duty of controlling the management was transferred. The second step, in the case of the nationalised concerns, was the appointment of the management by the appropriate Department of the Supreme Economic Council, to which it now became directly responsible. The third step, made possible by the development of the trade unions, was the appointment of the control commissions by the local trade union organisation instead of by the workers in the particular factory. These measures secured a greater measure of co-ordinated activity, by transferring day-to-day control from the factory committee—unwieldy, inexperienced and necessarily limited in its outlook—to a narrower group, more or less specialised, directed by a centralised body and supervised by a commission also holding its authority from a centralised body.

As soon as each Department of the Supreme Economic Council had ascertained the general facts relating to the industry under its control, it set up special sub-departments to direct the actual course of production and distribution for individual branches of the industry or for groups of factories. The most definite form of sub-department was the "Trust"—a group of factories run as a single unit by a Board acting more or less independently,

though responsible to the Board of the Department. For example, the Metals Department, which was formed on the basis of the already existing war industry committee, immediately divided its work among a number of Boards of Trusts—the Machine Construction Trust (“Gomza”), the Copper Trust, Nail Trust, etc. In so far as actual direction of concerns was transferred to the Boards of Trusts, the work of the Department for each industry became more and more the formulation of plans, the co-ordination of requirements and the provision of supplies and finance.

The appointment of the Boards of Departments was made by the Supreme Economic Council (through its presidium) in consultation with the Central Committee of the trade union concerned (Metals, Textiles, etc.). The Board for each Trust was similarly appointed by the Departmental Board in consultation with the trade union; and finally, the management board or individual manager of an undertaking was appointed by the Board of the Trust on a recommendation by the *provincial* economic council and the *provincial* organisation of the trade union. The provincial organisation of the trade union, in turn, based its recommendation on the nomination of the factory committee, so that the whole administration of industry, from top to bottom, was in effect controlled by the workers’ economic organisations, and indirectly—though none the less effectively—by the workers in the factories. Often the workers in the factories were even more closely concerned in the appointment of the higher directing Boards. For example, the majority of the Board of the Machine Construction Trust, Gomza (comprising twelve of the largest engineering factories), was appointed by a conference of delegates from these factories (*Ekonomicheskaja Fizn*, December 3rd, 1918). And a

resolution on the method of appointing the management of concerns, adopted by the first Congress of Economic Councils in May 1918, laid down that

“ At each works, factory, mine, etc., which has been taken over by the Republic, a factory or works management shall be appointed. Two-thirds of the managing board shall be appointed by the Supreme Economic Council . . . which may give the trade union organisation the right to nominate one-half of these members. The remaining one-third of the managing board shall be elected by the organised workers of the enterprise.”

It must be remembered that these management boards were appointed only in the case of nationalised undertakings, and that throughout 1918 most of the factories and works were still being run—so far as they were able to run in face of the shortage of supplies—by their private owners or managers. In such cases the workers were exercising influence and control on behalf of the Supreme Economic Council through the factory control commissions to which reference has already been made.

During 1918 and 1919 the process of unification and at the same time decentralisation went ahead. As each factory or group of factories was nationalised, it was attached to an existing Trust, or a new Trust was formed to bring it within the general scheme of organisation. And as the Trusts grew in size the work of their directing Boards became more and more complicated, and it became more and more impossible for the original Departmental Boards (Metals Board, Textiles Board, etc.) to have any current control over their activities. The Trusts became more and more independent, and in some cases

this was officially recognised by the elevation of the Board of a Trust into the ranks of the Departmental Boards—for example, the Board of the Armaments Trust, once subordinate to the Metals Board, became in 1919 the Armaments Board, on the same level as the Metals Board.

In so far as it is possible to characterise in a few words an extremely complicated process, it can be said that between 1918 and 1920 the work of the Supreme Economic Council consisted in bringing under its control wider and wider sections of industry, which it then transferred for administrative purposes to specialised Boards. During this period the whole emphasis was on the change of ownership ; whether the new administrative forms were satisfactory from the standpoint of production was of relatively little importance. During the whole period the country was in a continuous state of civil war. Considered only in their economic effects, the attacks on Soviet Russia by Germany and by the Allies, and by Kolchak, Denikin, Wrangel, Yudenich and others, supported by Allied finance and munitions, placed immeasurable obstacles in the way of planned economic organisation in Russia. Not only were skilled and experienced workers and technicians and vitally needed supplies constantly being absorbed for purposes of defence, but the occasional separation of whole districts from the centre, and the destruction of transport, factories and stocks by the invading armies, made production intermittent and in some areas impossible. Carefully worked-out plans for the use of coal or grain supplies would be absolutely shattered by an invading force which tore up the railway lines, destroyed bridges and rolling-stock, and even flooded mines and burned stores of grain and raw materials.

Already in the summer of 1917 Russia's transport and

industry was functioning only feebly and intermittently ; by 1920 industries in the areas mainly affected by the invasions—in particular the coal and iron industries—had come almost to a standstill. In all industries planned production had had to be subordinated to the fortunes of war and to urgent military needs, and urgent measures of a local and unorganised character had often to be taken in order to keep industry going at all. Thus the non-arrival of coal supplies might be got over by an expedition of the workers at a particular factory to the forests to bring in supplies of wood with which they could run the factory for a week or two ; and—apart from organised requisitions carried out with the authority of the State—there was a constant drift from the factories into the country in search of food. This was the period of paper plans and actual chaos ; it was the period in which economic achievements depended more on local initiative than on centralised organisation. But at the same time it was the period in which the foundations were being laid for the effective reorganisation of industry when the civil war came to an end.

Apart from the previously existing dislocation of industry and the further dislocation caused by the civil war, the whole administration of production and distribution, even within the sphere controlled by the Soviet Government, was constantly weakened both by deliberate acts of sabotage and by the rawness and incompetence of many of the new administrators and managers of industry. There was no remedy for such weaknesses other than the slow and painful process of training new administrators and managers. And, towards the end of the period, partly because the stability of the new Government became more and more apparent, and partly because the factory committees began to appreciate the need for expert help, engineers and technicians, often even former managers,

began to be drawn into the current work of administration. The report of the Supreme Economic Council for 1920 recorded that, out of a total of 1,143 persons on the managing boards of factories under its control, 726 were workers, 398 were "specialists," and 19 were clerical workers. And the workers in responsible positions were undergoing a constant process of selection, on the initiative of the factory committees, of the trade unions, and of the provincial and central organisations of the Supreme Economic Council.

A third source of confusion was the overlapping which was the inevitable result of the rapid growth of new organisations. The Supreme Economic Council had been set up as the co-ordinating body for production and distribution ; but while it was spreading its sphere of influence and elaborating its organisation, many other State Departments, Town Soviets and other local organisations were involved in similar work on narrower fields. Practically every People's Commissariat was compelled to undertake the organisation of some field of production or distribution ; and Town Soviets had taken over not only former municipal undertakings, but also many enterprises formerly privately owned. There was inevitable competition for labour and for supplies, and the process of sorting out the spheres of work and authority was long and difficult. At the same time the difficulties made clear the need for the establishment of some yet higher co-ordinating body—a body entirely divorced from actual administration. The recognition of this need led to the establishment of the Council of Labour and Defence, with its auxiliary Department, the State Economic Planning Commission—"Gosplan"—which was to survey and formulate plans for the whole economic life of the country, including both industry and agriculture, finance and transport, as well

as production and distribution, whether nationalised, municipal, co-operative or privately owned. But before Gosplan could have any real influence on the country's economic life a long process of co-ordination and decentralisation had to be passed through. The period of "military Communism" ended with the secure establishment of the new Government's authority throughout Russia ; and after 1920 peace made it possible to begin a general transformation of paper plans into real food and raw materials and manufactured goods. The change of ownership, at least in all large-scale industry, had been completely carried through, and the next problem to be solved was the building up of a system of organised administration.

CHAPTER II

THE EARLY STAGES OF REORGANISATION

After the final defeat of the invading armies and the termination of the civil war in 1920, the Government was able to turn its attention to general questions of reorganisation. The process of obtaining possession of the factories had been completed ; on the initiative of local Soviets it had even been carried considerably further than the central Government had intended. As a result :

(1) The Soviet State was obliged itself indirectly to administer an enormous mass of the most heterogeneous types of undertakings, quite beyond the reach of the scanty resources of food and raw materials at its disposal. The immediate consequence of this was the utter impossibility of the rational and economic utilisation of those resources, and as a result their dissipation.

(2) The supplying of undertakings was broken up amongst various Departments, and was not made directly dependent upon their productivity, with the result that powers were vested in many, while responsibility fell upon none.

(3) With these methods of supply and under the existing conditions of remuneration, those who participated in production were not and could not be interested in the result of their labour or in the improvement of the methods of production.

(4) Thanks to the three years' war and the extreme ruin throughout the country, it was impossible to draw up and apply a general economic plan, embracing and co-ordinating the various branches of national economy.

These were the explanations given by the Soviet Government on August 9th, 1921, when it issued detailed instructions for the application of "the new economic policy." From the purely administrative standpoint, therefore, Nep—the new economic policy—was especially designed to concentrate attention on the most important of the nationalised factories, in order to ensure that the new administrative machinery was not overwhelmed by the very number and complexity of its burdens. From a wider economic and political standpoint this narrowing of the field of direct State administration—with its corollary, the granting of official permission to private capital to operate outside this field—was also necessary. Production had fallen to only a small percentage of the pre-war level, and it was vital to encourage every possible development of output. Even the factories on which the State apparatus was to concentrate could not function unless supplies of raw materials and food were assured : and this meant the abandonment of forced levies of agricultural products and the purchase of supplies at prices which, even if fixed by the State, bore some relation to existing circumstances. It is not necessary to go into the detailed financial history of the preceding period : the essential feature—as in other belligerent countries—had been the continuous depreciation of the currency, and, with the adoption of a new policy involving production and trade on the basis of money transactions instead of requisitions and barter, it was clear that the currency would have to be stabilised, as an essential part of Nep.

During the spring and early summer of 1921 the general principles of the new policy were worked out, and on August 9th, 1921, the Council of People's Commissaries issued a decree indicating its application in the sphere of industrial organisation. The essential features were : concentration of the State apparatus on the larger factories, the leasing of smaller enterprises to groups or individuals who were prepared to run them, and the closing down of other enterprises.

(1) The State, as represented by the Supreme Economic Council and its local institutions, concentrates under its direct control certain branches of industry, and certain large enterprises of special importance to the State, and other enterprises subsidiary to the latter.

(2) Enterprises not included in the above groups will be leased to co-operative societies, workers' associations and similar groups, as well as to private persons. . . . Soviet institutions must apply this provision energetically to all undertakings which cannot be started or run by Soviet economic organisations, in order that the State mechanism may be relieved of small enterprises and works.

(3) Undertakings which are not leased, the conduct of which the State and its organs do not undertake, are liable to be closed.

The new economic policy did not reverse or modify the change of ownership which had been carried out during the three preceding years. The enterprises which had been nationalised remained the property of the State, and the more important enterprises were retained for direct administration by the State under a system which was

gaining precision and effectiveness from day to day. Outside the circle of the State-administered enterprises—a circle which was constantly widening—private capital was allowed to organise production in minor industries and small factories, until such time as the State apparatus could usefully be extended to cover these. Fundamentally, as subsequent developments have shown, Nep was a return to the earlier policy of central organisation and gradually intensified control which had been outlined by Lenin in his letter from Finland. The events which made it impossible to adhere to this earlier policy have been summarised in the first chapter—the civil war and the sabotage of former owners or managers of industry, combined with the eagerness of particular groups of workers or local Soviets to carry through without delay the change of ownership which was implicit in the revolution. Nep accepted and preserved the change of ownership, but made it possible for private capital to continue to function in a limited sphere while the central State organisation of industry was being developed and extended.

An important feature of this period was the reorganisation of the central apparatus itself. The Supreme Economic Council had been designed originally to be the co-ordinating body for the whole of Russia's economic life, but the task of organising State industry alone had been too much for it. The Council of Labour and Defence—a special war council of the Government—had been set up during the civil war to undertake the co-ordination which was of vital importance for defence purposes, and it had thrown up a special commission, styled "Gosplan," or the State Economic Planning Commission, to investigate important supply problems and to prepare plans for production and supply extending beyond the range of State-controlled industry. The exigencies of

the situation during the period of civil war led to the assumption by the Council of Labour and Defence of control over every aspect of production and distribution—over the work of the Supreme Economic Council and of every other economic department and organisation. At the close of the civil war it still retained this dominant position, and its statistical and planning section, Gosplan, was in possession of far wider material than had been collected by the Supreme Economic Council ; while the latter body was for all practical purposes submerged in the administrative problems of State industry.

The decree of August 9th, 1921, recognised and stabilised this development. Gosplan was made a permanent organisation and the leading position in Russia's economic life was handed over to it, while the Supreme Economic Council reverted formally, as it had already done in practice, to the control of only one sector—State industry

The general economic policy of all Russia is being worked out by the State Economic Planning Commission, a committee of the Council of Labour and Defence. Its duties are to co-ordinate the needs and resources of industry, agriculture, transport, food supply, etc. As soon as possible it must determine which are the most fundamental and vital industrial enterprises, and by concentrating supplies, raw material, and labour power on these enterprises, must organise their production in accordance with shock tactics, raising it to the highest point possible. . . . It must institute a single economic scheme embracing all Russia. It must also harmonise the schemes of the economic departments, including the Commissariats, and must superintend the working of the scheme in general and its actual details.

The Supreme Economic Council, acting as the

Commissariat for Industry, carries out those portions of the scheme which refer to State action in the sphere of industry.

Not only were the Supreme Economic Council's activities limited in this way : the functions of the Council in relation to the administration of State industry were also limited. The field was narrowed down by the lopping off of the smaller nationalised enterprises, which were leased or closed down ; and the Council had to elaborate a scheme of administration covering at first only the larger enterprises in the most important industries. The instructions for the formulation of this scheme ensured that it should embody the maximum of decentralisation : the Supreme Economic Council was not to undertake the direct management of enterprises, but merely general control. The form of decentralisation was not entirely new or evolved in the abstract : it was essentially the elaboration and improvement of the administrative forms which had grown up during the preceding period. The general instructions to the Supreme Economic Council, dated August 12th, 1921, in effect confirm the policy, already in operation to a limited extent, of grouping enterprises into Trusts :

The largest, technically equipped, methodically organised, and suitably situated undertakings in any branch of industry may be unified in a special combination for the purposes of economic efficiency. Individual enterprises may also be set apart in this way. . . . The Presidium of the Supreme Economic Council, in agreement with the Presidium of the All-Russian Council of Trade Unions, is empowered to confirm the reorganisation of groups of enterprises, and of single undertakings, along the lines indicated.

The Trusts were themselves grouped together under "Chief Committees" for each industry, working as departments of the Supreme Economic Council, and appointed jointly by the Presidium of the Supreme Economic Council and the trade union concerned in the industry. The Chief Committee, again in consultation with the trade union, appointed the Board of each Trust ; and the Board of each Trust, in turn, appointed the manager or managing board of particular enterprises, in agreement with the local or district trade union organisation.

All of this was in conformity with the practice already established. The essentially new point in the instructions of 1921 was the actual measure of decentralisation involved. A sharp break was made in the policy of central management. The establishment of a Trust with its separate directing Board was not merely a formula : the directing Board assumed full responsibility for the management of the enterprises of which the Trust was composed, and was no longer required to refer administrative questions to the Chief Committee for the industry. The Trust was an independent financial unit ; it started with the factories and such stores of raw materials and manufactured goods as were available, taken over on a valuation determined on certain general principles ; in most cases the Trust was also given a small—and completely inadequate—sum of money ; and it was then expected to start production and sale on a commercial basis—the profit or surplus of production reverting to the State.

Each Trust had to prepare programmes of production and financial estimates, which were submitted to the appropriate Chief Committee for approval ; the Chief Committee in turn was responsible for seeing that the general plans of production prepared by Gosplan were adhered to in the programmes of the various Trusts. But,

after its programme and financial estimate had been approved, the Board of each Trust was directly responsible for organising and administering the detailed work : the Trust became in effect an independent financial and administrative unit.

At the same time, the independence of each Trust was limited by the general laws of the country, and in particular by the labour legislation. Apart from the contributions to various social funds legally payable by the employing organisation and not by the workers, all wage conditions, standards of production, engagement and dismissal of workers, provision of housing and club facilities, etc., had to be agreed between the Board of the Trust and the appropriate trade union. The wages and conditions agreements were themselves based on principles laid down by the Commissariat for Labour and the Central Council of Trade Unions, so that in all labour questions the Board of the Trust could operate only within certain limits.

Similar limits were set in regard to the prices policy of the Trusts. Much of their production was taken over by other State Trusts and organisations at fixed prices ; on the other hand, of course, they got the advantage of a similar arrangement in securing raw materials or supplies from other State Trusts. But the Trusts were also allowed to sell their products in the open market, so far as this was necessary in order to obtain finance for current needs or for the purchase of machinery or equipment required.

The actual formation of the various Trusts—involving the selection of the enterprises to be grouped, the valuation of equipment and stocks, the determination of the money capital to be provided by the State, and a host of other practical points—was extended over a very long

period, and in certain minor industries the process is still continuing. As each Trust was formed on the new basis, a special charter was drafted and sanctioned, and by the end of 1922 it had become apparent that there were many divergencies of principle in the statutes of the various Trusts, while many points had arisen which had not been provided for in the statutes. After considerable discussion by the various economic and political bodies, on April 10th, 1923, the Council of People's Commissaries issued a "Decree on State Industrial Undertakings working on a commercial basis (Trusts)" which definitely settled the principles on which the Trusts were to work, and, so far as State undertakings in Russia are concerned, this decree fills a place analogous to that occupied by the Companies Acts in Britain.

It is not necessary to describe in detail the formal sections of this decree—the sections which, as in the company law of other countries, provide for registration, statements of capital and directors, and the annual publication of audited accounts. Other features, however, are of interest because they arise out of the special conditions in Russia and help to make precise the general description already given.

In the first place, the capital of the Trust is divided into "basic" and "working" capital. The basic capital consists of the factories and equipment (in the first instance, at a valuation); the Trust cannot dispose of them, nor can it offer them as security for a loan. On the other hand, the working capital—materials and supplies of all kinds, including money—are entirely at its disposal, and no State Department or institution is either responsible for them or is entitled to interfere with them. "The State Treasury is not responsible for liabilities incurred by the Trusts"; on the other hand, "No State institution or

enterprise has the right to take from the Trust its property or articles produced by the Trust, except by agreement with the Trust." In effect, the decree ensures the real economic independence of the Trusts, although the lines on which they are to work from year to year are laid down by higher authorities.

The money capital for each Trust is entirely provided by the State, through the Budget of the Supreme Economic Council ; but after formation the Trust may obtain short term loans from any bank on ordinary commercial lines ; long term loans require the sanction of the Supreme Economic Council and the People's Commissariat for Finance, which may or may not guarantee the principal and interest.

The provisions covering the allocation of profits are general, and percentages are to be fixed for each Trust by the Supreme Economic Council. In the first place, a certain percentage of the basic capital must be set aside each year as a sinking fund for renewals. Of the profit remaining after this allocation, not less than 20 per cent. must be set aside as a general reserve, until the reserve reaches one-half of the total capital. Commissions and bonuses to employees may also be paid, and the balance of profit is then handed over to the State Treasury. The reserve is the fund for normal extension and development ; special extensions are usually provided for in the form of long term loans or additional capital granted by the State through the Budget of the Supreme Economic Council.

Apart from the handing over of surplus profits to the State, the Trusts were made liable to all forms of taxation on the same basis as privately owned concerns. The purpose of this was not only to put the Trusts on a competitive basis in relation to privately owned concerns, but

also to ensure that the overhead expenses of the State were as far as possible equally distributed over production.

The question of prices was also touched on in the decree, which laid down the general rule that the Trusts could sell their products at prices freely arranged with the buyers, but that in special cases the Supreme Economic Council could fix prices for articles of general consumption. But while the Trusts were free to buy and sell in the open market—that is, from any concern, whether publicly or privately owned—

in all buying and selling transactions the Trust must give preference, where terms and conditions are equal, to State Departments and co-operative associations.

All of these provisions are useful indications of the extent of the financial autonomy granted to the Trusts. But the fifth section of the decree, which lays down the machinery of control and the responsibility of the various bodies concerned, is of special importance. As already stated, the Supreme Economic Council (through the Chief Committee for the industry concerned) organised the formation of the Trust and appointed the Board of the Trust ; it examined and sanctioned or modified the output programmes and financial estimates prepared by the Board of each Trust ; it controlled the fulfilment of the programmes and could authorise modifications if these were clearly required by the actual circumstances. The Supreme Economic Council had also the duty of examining and confirming the annual accounts of each Trust, and of sanctioning any expenditure from the reserve funds, as well as the allocation of surplus profits. It was authorised at any time to remove members of the Board of a Trust and to appoint new members. All these functions

are clearly functions of control and not of management ; but in case any doubt might remain a special paragraph states

“ the Supreme Economic Council does not interfere in the current administration and management work of the Board of the Trust.”

The Board of the Trust was to consist of three to five members, holding office from year to year ; but the Supreme Economic Council was authorised to appoint individual managers in lieu of Boards when it considered this advisable. The decree laid down the principal functions of the Board of the Trust as follows :

“ (a) Organisation of production and management of all undertakings forming part of the Trust.

“ (b) Control of the accounts and the preparation of the annual accounts, balance sheets, estimates, and output plans.

“ (c) Appointment and dismissal of employees and workers.

“ (d) Purchase and sale of goods for cash or credit.”

For each Trust a special Control and Audit Commission was established ; it was to consist of three members, two appointed by the Supreme Economic Council and the third by the trade union concerned in the industry. The duties of this Commission included the auditing of the Trust's accounts, but were considerably wider than the duties of company auditors in other countries, as the Commission had to examine and report to the Supreme Economic Council on the draft estimates and output plans and on all other periodical reports made by the Board of the Trust. The Control and Audit Commission was therefore an outpost of the Supreme Economic Council and

the trade union, carrying on a continuous supervision of the Trust's activities. But in order to prevent any weakening of the Board's authority the decree expressly provides that the Control and Audit Commission has no right of prior control, i.e. it has no authority to express its views in advance, whether consulted by the Board or not.

At the time when this decree was issued there were no less than 458 Trusts in existence, employing a total of 1,146,000 workers, or an average of 1,800 workers per Trust. This figure is a clear indication that the idea of a Trust as a large-scale amalgamation of enterprises had been unduly extended to cover almost any grouping, however small, of separate factories and works. A large number of small amalgamations had been formed within each industry, and very little advance had been made in the real organisation of each industry under a single or a few large Trusts. In certain industries, however, large combines existed, grouping together all the enterprises in certain districts, although in other parts of the country there were numerous small "Trusts" which hardly deserved the title. In the textile industry, for example, there were fifty-five Trusts, of which ten employed 216,000 workers, eighteen 100,000 workers, and the remaining twenty-seven only 19,000 workers. The same distribution with regard to size was evident in the metal industry, with sixty-one Trusts in all; six of these employed 143,000 workers, and the remaining fifty-six Trusts employed between them only 72,000 workers.

In the general examination of industrial organisation which followed the publication of the decree on Trusts it became evident that the unification of the smaller Trusts was essential for a really co-ordinated scheme. During the years that followed, this unification proceeded steadily, the larger Trusts in each industry absorbing the smaller

Trusts and the factories which still remained isolated. But it must not be overlooked that the formation of the smaller Trusts had served the double purpose of preparing the ground for absorption and of freeing the Boards of the larger Trusts from a mass of relatively petty complications during the early period of their existence.

Meanwhile, another process was developing. The Trusts as originally formed were autonomous financially, buying their own separate requirements and selling their own separate products. The disadvantage of this separatism in the market, both in buying and selling, soon became clear. A dozen or more separate concerns in the same industry, often even in the same district, would be competing for raw materials and stores on the one hand, and for a market for their products on the other. The difficulties arising from this separatism, apart from their effects on the industrial units, also had serious political disadvantages. At that period there was a shortage of most manufactured goods and a very serious shortage of fuel and raw materials. The chaos in buying and selling made the shortage more acute, besides producing great fluctuations in prices. The difficulties were particularly marked in the textile industry, which was manufacturing in the main for the general consumer and, owing to the shortage of raw cotton in the Soviet Union, was obliged to seek a large proportion of its raw material abroad. The competition of the numerous Trusts in the textile industry seemed at first a necessary result of their autonomy ; but by the early part of 1922 it was realised that the competition must be ended. There were two alternatives : to restore to the Chief Textile Committee under the Supreme Economic Council some of its former operative functions ; or to establish a new co-ordinating organisation between the various Trusts. The first alternative would have

involved a reversal of the settled policy of decentralisation, and it was therefore rejected in favour of a new form of organisation—the Syndicate. The Textile Syndicate was the direct expression of the trading (as distinct from the productive) interests of the autonomous textile Trusts, which took up shares in the Syndicate and appointed their representatives on its Board of Directors. The Syndicate at first merged only the various selling departments of the separate Trusts ; the purchase of raw material was still in the hands of a special committee under the Supreme Economic Council, which retained the monopoly for a further year, when the Syndicate took over all the trading functions of the Trusts.

Like the Trusts, the Syndicate was subject to general control by the Supreme Economic Council ; in practice this meant that the appointments to the Board of the Syndicate were subject to the approval of the Supreme Economic Council, and that the latter examined the reports of the Syndicate's activities. But the Syndicate was directly responsible to the Trusts which held shares in it and which transferred to it all their commercial operations. The concentration of the buying and selling organisations of all the Trusts in the apparatus of the Syndicate at once effected substantial economies, and with this single joint apparatus the sale of textile goods on a planned system, involving a reasonable distribution of the available products over the whole area of the Soviet Union, became possible. The formation of the Textile Syndicate in fact prepared the way for a new system of co-ordination, centralised but not bureaucratic, and closely in touch with the requirements both of the producing units and of the consumers. During 1922 and 1923 many other Syndicates were formed in other industries, on the same general principles as the Textile Syndicate.

The growth in number of the Syndicates was accompanied by an extension of their functions until, as we shall see in Chapter IV., they became not mere auxiliary commercial organisations, but directing bodies for all the activities of the producing units which they embraced.

As was the case with the Trusts, the Syndicates were also established on the basis of "commercial accounting." Starting with a capital subscribed by the Trusts, each Syndicate operated as a distinct financial unit, covering its overhead expenses and making a profit on the basis of commissions charged to the Trusts in respect of the various buying and selling transactions. A few of the Syndicates originally formed were not successful, and these were later wound up altogether or transformed ; but in general the new form of organisation was successful financially, and particularly successful in straightening out the chaotic conditions of the market.

From the standpoint of the organisational structure of State industry the main features of the period from 1921 to 1927—the period of the introduction and development of the New Economic Policy—were the trustification of all important concerns and the formation of Syndicates, with the transference of all operative functions from the Supreme Economic Council to the Trusts and Syndicates. Outside the sphere of State industry numbers of smaller enterprises were being run by individuals or groups on a private profit-making basis ; and agriculture was almost entirely conducted on an individual basis. At the same time, the steady development of organisation in every branch of industry, and the accumulation of statistical and other information in the hands of the central Departments—especially the State Economic Planning Commission—made it possible to plan Russia's economic activities as a whole, without any current interference in the

administration either of State or of privately owned enterprises.

The economic planning activities of the Soviet organisation of industry fall into three stages. There was the first attempt at centralisation and co-ordination under the Supreme Economic Council immediately after the revolution in November 1917. This broke down partly owing to the absence of any effective organisation in the actual producing units—the factories—but more particularly owing to the dislocation and destruction caused by the civil war. As already indicated, this was the stage of paper plans and relatively little actual achievement ; nevertheless, it was a stage which prepared the way for the second stage of building up a definite organisation within State industry. In the second stage, dating from 1921, plans of production, in so far as State industry was concerned, became more and more real, and achievement corresponded each year more and more closely with the plan. The third stage—the stage of the Five Year Plan, starting from 1928—is marked by the extension of planned production from State industry to Russia's economic life as a whole. It is obvious, of course, that the process has been continuous. The compilation of statistics and the gathering of economic information, however inadequate in the first period, led gradually to the possibility of laying down definite plans of work for the State-run industries ; these plans had to take into account both the output and the needs of those industries or sections of industry which were not being run by the State, and with increasing knowledge and experience year by year a general and substantially accurate system of planning, covering the whole of Russia's production and distribution, has been developed.

So far as the general system of administration was

concerned, the introduction of the new economic policy in 1921 did not involve any fundamental changes. As in the preceding period, the Supreme Economic Council, jointly with the trade union directly concerned in each industry, appointed the Directors of the Trusts, and in turn the Trusts, jointly with the central or provincial trade union organisations, appointed the managers of particular enterprises. The engagement and dismissal of workers was in the hands of the manager, except in so far as agreements with trade unions provided that the consent of the factory committee must be obtained. But in all cases, under the Code of Labour Laws issued on October 30th, 1922, the right of the workers' factory committee to express its views was secured by the provision that

“ the management must inform the committee within three days of the employment of new workers, and must give it three days' notice of proposed discharges ” (par. 161, c).

Even where there was no collective agreement with the trade union ensuring that the factory committee's approval must be obtained before engagements or dismissals became effective, this general provision of the Labour Code made it possible for the factory committee to examine every individual case and, if it was not satisfied, to make representations to the management. If it obtained no satisfaction from the management, the factory committee could make further representations through the trade union machinery to the Board of the Trust, and even to the Supreme Economic Council.

Moreover, although the factory committee did not itself appoint the manager or managing board, it was always consulted by the trade union, which had the right to participate in the appointment, and therefore to press

its own candidates and veto others. If no agreement could be reached between the trade union and the Board of the Trust, the question was settled by the higher bodies—the Central Council of Trade Unions and the Supreme Economic Council. Even after the appointment of the manager the factory committee could, and frequently did, take effective steps to secure his dismissal, by making representations through the trade union machinery to the higher authorities. Thus the factory committee continued to have effective control of the management, although the actual appointment of the manager or board was no longer in its hands. This system achieved the desired result—relative stability in the management, with the Boards of the Trusts insisting on technical efficiency, and on the other hand the possibility of removal by the workers where there were good reasons for this step.

It is not to be supposed that the system worked perfectly. Reports of trade union conferences, especially in the early years of the new economic policy, show that numerous complaints were made by the workers of the difficulty of getting managers removed even where there were solid economic reasons for this course. At Economic Conferences counter-charges were made that the trade unions themselves put forward candidates who were unfitted to carry out the duties of management. Undoubtedly there were many cases to be quoted in support of each contention. The main cause of the difficulties which arose was the shortage of adequately trained managers who were willing to work in Soviet industry, rather than any inherent difficulty in the system of appointment. It must often have been very difficult to choose between, say, an experienced manager of unsatisfactory personal character and an inexperienced candidate who had the support of the workers. In such cases it is not surprising that the

higher authorities on both sides—trade union and economic—should temporise and delay making changes even where the manager was clearly unsatisfactory. It was one of the many problems which could only be solved gradually, by the intensive training of working-class candidates. This training was developed rapidly after 1921, both by the trade unions and the Commissariat for Education ; and it is clear from both trade union and economic reports that the problem is no longer acute, and that the general quality of the management, at least in important enterprises, is now relatively high.

It will be recalled that in the first stages of the revolution the factory committee elected by the workers was often the committee of management, or nominated a control commission to control the work of the manager. At a later stage the control commission was appointed by the Supreme Economic Council and the trade union concerned, and at this stage its report was made to the higher authorities and not to the workers in the particular factory, who no longer had direct control over the management. But at all times the factory committee had the right to have information about the economic position of the factory and to put forward suggestions for improved working. Wherever the factory committee was active this right was fully exercised ; and in the Code of Labour Laws of October 1922 it is laid down as one of the functions of the factory committee

“ to assist the normal progress of production in State enterprises and to participate, through the appropriate trade (industrial) union, in the regulation and organisation of the economic life of the country ” (par. 158, *e*).

Apart from the regular reports of the management to

the factory committee the system of "production conferences" was instituted. These were general meetings of the workers at each enterprise to receive reports from the management on the production and economic position of the concern, and to discuss all matters which either the manager or the workers cared to raise in connection with organisation, production methods or other economic points. The object of these was to keep the workers informed of the actual position and to draw them into the work of management, even if only indirectly. By 1926 production conferences had become a regular part of the life of the larger enterprises, although—as, for example, at the Soviet Trade Union Congress in December 1926—many criticisms were made of the ineffectiveness of these conferences. It was urged that the managers in general did not present the material in a way that could be understood by the workers, and that, on the other hand, even the factory committee did not make sufficient effort to examine the report in a practical way. In order to make the conferences more effective, it was decided to develop economic training classes inside the factories and to urge the factory committees to take the lead in discussing the managers' reports. It is stated that the production conferences are steadily becoming more effective: the managers have learnt to make their reports more clearly, bringing out points which can be understood and taken up by the workers; and, on the other hand, the percentage of workers attending the production conferences is rising, and the factory committees have learnt to initiate and invite useful discussions. The production conferences have been of great importance both in the preparation of the Five Year Plan and in the actual carrying through of the work planned for each enterprise.

From 1922 onwards the new economic policy and the

decentralised administrative system gave substantial results in production and distribution. To some extent the increase in production after 1921 was simply due to the removal of the difficulties caused by actual warfare over large areas of the country. It was once more possible to begin work at numbers of factories which the war had deprived of fuel and raw materials. It was once more possible to move products from one place to another. Total industrial production, which in 1920 had fallen to below 20 per cent. of the pre-war level, had already reached 40 per cent. by 1923, and by 1927 had actually passed the pre-war level. The general economic results justified the system of administration, and no substantial changes were found to be necessary. The processes of decentralising the administration and centralising the planning of production developed together, each helping the other. But the general structure of the productive system, embodying the result of ten years' experience, remained unchanged, and an examination of the system as it is working to-day shows merely further elaboration and extension of principles which were already well established by 1927.

CHAPTER III

THE STATE TRUSTS

The conditions leading to the formation of Trusts combining State enterprises within each industry have been described in Chapters I. and II. The principle of unification through Trusts was maintained, and the process of drawing in smaller enterprises to the larger units continued for several years. But the structure and functions of the Trusts were modified in certain important respects by a Decree issued in 1927. These changes were made necessary by the expansion of industrial output and the rationalisation of production and distribution, as well as by the formation of the Soviet Union and the division of functions between the Supreme Economic Council of the Soviet Union and the Economic Councils of the separate Republics. But there were also fundamental changes in the general conception of the Trusts. At the time when the 1923 Decree was issued, the leading idea behind the formation of Trusts was still decentralisation—the abolition of bureaucratic management by the Supreme Economic Council, and the improvement of economic efficiency by placing full responsibility on the Directors of the Trusts, who were expected to show that they were working on a strict accounting basis and were making a profit. The 1923 definition of Trusts (par. 1 of the Decree) was :

“ State industrial undertakings, authorised by the

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Government to carry out their operations independently, in accordance with a special charter granted to each, and working on a commercial basis with the aim of acquiring profits."

The Decree on Trusts of June 29th, 1927, which recorded the modifications introduced during the four years since the first Decree, showed a certain return to the conception of central control ; the definition was :

" A State Industrial Trust is a State undertaking organised on the basis of a special charter, as an independent economic unit with the status of a legal entity and with capital not divided into shares ; it is under the control of a State Department named in its charter, and it works on a commercial basis in conformity with the plan of work confirmed by the above-mentioned State Department."

In the new formation it will be observed that the reference to " acquiring profits " was omitted. To a certain extent this was due to the political controversy which had centred on this phrase, which had been represented as implying that the sole function of the State Trusts was to make profits, without bringing out their function in the general organisation of industry and in preparing the ground for a planned system of production.

The new formulation was partly a correction of false ideas of the functions of the Trusts, and partly a recognition of the fact that the development of the Trusts had already gone so far that it was possible to bring out more clearly their place in the scheme of Soviet industrial organisation. To a certain extent, in the early period of the Trusts, their Directors had concentrated attention on the

making of profits for each Trust without sufficient regard to the economic needs of the country as a whole. This in turn was due to the lack of any efficient co-ordinating machinery at the centre. The original machinery of centralised management by the chief committees under the Supreme Economic Council had been unsuccessful, and the formation of the Trusts was a definite move towards decentralisation and the abolition of bureaucratic control. The Directors of the Trusts were put in charge of groups of enterprises and instructed to run them as independent financial units ; and, even if the Directors had been anxious to subordinate the financial interests of the Trusts to the general economic interests of the country, the machinery of co-ordination was not yet developed sufficiently to keep them informed of what were these general economic interests or to guide their work in conformity with a general plan. The sharp break with bureaucratism in the management of industry was essential and it produced mainly good results ; but among the bad results was undoubtedly the excessive concentration on profit-making and the tendency of the Directors of the Trusts to justify every form of activity by showing that they were working at a profit. This was the period of the "Nepman"—the private traders who made large profits by buying the products of the State Trusts and selling them either on the general market or even to other State Trusts. The State Trusts, generally speaking, were working in complete ignorance either of the production or needs of other State Trusts, and both production and distribution were chaotic.

The formulation in the 1927 Decree on Trusts was essentially a reminder to the Directors that the Trusts were independent units only for administrative purposes, and that their work must be subordinated to the general

plan of production and distribution. Each Trust is only a part of an industrial machine whose work is laid down and supervised by a central body. Although each Trust is given administrative independence, because this has proved to be the most efficient form of management of particular concerns, nevertheless the work which it is to carry out is allocated by a central body in order to ensure the maximum efficiency in the industrial system as a whole. The conception of planned work was present in the 1923 Decree—as we have seen in Chapter II., that Decree instructed the State Economic Planning Commission to prepare a general economic plan. The 1927 definition of Trusts showed that the stage of actual working on the basis of a general economic plan had been reached.

Moreover, the strict demarcation between the functions of general control and particular management, which the formation of the Trusts had been intended to achieve, had come to be recognised as impossible. On the one hand, the chaotic conditions of production and distribution in the early period of the Trusts had resulted in occasional interference on the part of the higher authorities in the work of the Trusts, more especially in their prices policy. Control clearly involved interference in management. And, on the other hand, the fusion of the smaller Trusts into larger Trusts, and the generally expanding scale of production, transformed the Boards of the Trusts into controlling bodies supervising the work of managers of particular factories, instead of really administrative bodies. The organisation of production on a large scale involves an increasing remoteness of the higher managing bodies from the detailed work of management, but it does not by any means involve their exclusion from all administrative functions and their transformation into bodies

exercising merely *ex post facto* control. In the same way the independence of the Trusts, even in administrative questions, was necessarily qualified in practice. During the four years from 1923 to 1927—and in fact ever since—the precise delimitation of functions between the Trusts and the Supreme Economic Council had been the subject of controversy, and there had been continual “struggles for power” over particular issues. On the whole, the crude decentralisation policy of 1923 was reversed, and after the 1927 Decree the Trusts were more closely linked together both with each other and with the central apparatus—the Supreme Economic Council. But this does not mean that there was a return to bureaucratic centralism. The attempts made by the apparatus of the Supreme Economic Council to preserve its functions of management over industry were vigorously resisted, and the structure of the Supreme Economic Council’s apparatus was completely changed, so that there was no longer the machinery for bureaucratic centralism. On the other hand, the decentralisation involved in the formation of Trusts was modified, especially in connection with buying and selling operations. By 1927 the buying and selling operations of the Trusts were being carried out mainly by the Syndicates, while the operations of the Syndicates were governed by the general distribution plan and by the price-regulating authorities.

In connection with prices and buying and selling generally, the 1923 Decree provided that the Trusts should sell their products “at prices freely arranged with the buyers,” although the fixing of prices for articles of general consumption was also contemplated. The 1927 Decree, taking into account the general fixing of prices for wholesale transactions—which is a necessary part of a general economic plan—lays down simply that prices must be in

conformity with the price regulations in force from time to time.

It will be noted that a part of the definition of a Trust in the 1927 Decree is that its capital is not divided into shares. Share companies exist in the Soviet Union, and in particular most of the trading concerns, including the Syndicates, were formed on a share basis, the capital being subscribed either by State Departments or other State institutions (including the Trusts) or by co-operative organisations or private individuals. But the industrial organisations are almost exclusively State Trusts, not share companies, which exist in industry only in exceptional cases—as, for example, in groups of smaller enterprises which in some cases have been formed into a single company, the local Soviets concerned holding the shares.

In certain cases, a single industrial enterprise may be given the charter and status of a Trust. This applies to very large enterprises which are situated at a great distance from other enterprises in the same section of industry. In such cases there may be no organisational advantages in linking the enterprise with others, and it is given the independent status of a Trust in order to bring it into the general scheme of organisation. But as a rule the Trusts are combinations of enterprises, and the purpose of the Trust organisation is precisely this linking together of separate enterprises in order to facilitate co-ordination and rationalisation in productive methods, administration and finance.

In the overwhelming majority of cases the Trusts were formed on a horizontal basis—i.e., they covered enterprises in the same sector of industry and carrying out more or less similar work. But there are also Trusts of a vertical type—covering enterprises working on various stages of production, from the extraction of raw materials to the

production of finished goods. Trusts have even been formed of completely different and unrelated types of enterprise, merely because the enterprises were geographically near to one another. But the tendency is to split such geographical Trusts and to join the parts to other Trusts on the basis of the nature of the industry.

At the same time, geographical proximity is obviously an important factor to take into account when the formation of enterprises into a Trust is being considered, provided that the enterprises belong to the same branch or interrelated branches of industry. Where enterprises are necessarily concentrated in particular areas—as for example in the oil and coal industries—the geographical demarcation of the Trusts is easily determined. Thus the oil industry was organised in seven Trusts corresponding with the seven oil regions—Azerbaijan, Grozny, Emba, Kuban, Turkmenistan, Uzbekistan, Sakhalien ; and the coal industry was similarly organised in regional Trusts.

The process of trustification in other industries, in which the enterprises are more or less widely scattered, did not reach such a speedy conclusion as in the oil and coal industries. As we saw in Chapter II., in the early period of trustification large numbers of small Trusts were formed, and the process of their formation into larger units or absorption by larger Trusts has not reached finality. The formation of a very large unit may involve its transference from control by the Economic Council of one of the Republics to control by the Supreme Economic Council of the Soviet Union, which is responsible for Trusts regarded as of “All-Union importance”—i.e., producing for the whole area of the Soviet Union, as distinct from those which normally sell their products within a single Republic or district. The number of Trusts of each class is therefore more or less constantly changing, apart from the

formation of new Trusts ; but the relatively high degree of concentration achieved by 1929 is shown by the following statistics of the Supreme Economic Council for that year :

All-Union Trusts, under the Supreme Economic Council of the Soviet Union	76
Trusts under the Economic Councils of the separate Republics	126
District Trusts, under District Economic Councils	556

The All-Union Trusts were immense organisations, in some cases covering whole branches of industry. The Sugar Trust, for example, united under a single management nearly 200 factories in every part of the Soviet Union ; " Donugol," the largest coal Trust, united the whole coal industry in the Donetz coal basin, with an output of some thirty million tons a year ; the Ivanovo-Vosnesensk Textile Trust covered the whole textile industry in that district, employing over 100,000 workers ; and the " Uralmet " Trust covered the whole metal industry of the Ural region, having itself been formed by the combination of ten previously existing Trusts in that area.

One of the accompanying features of this steady concentration of industry in the Trusts was the tendency of the Trust organisation to confine itself to the purely productive side, and to throw off the burden of other operations by setting up special organisations under their own separate management. The most general form of this separate organisation was the Syndicate, the growth and functions of which are described in the next chapter ; a number of share companies were also set up by the Trusts for special purposes, such as important export operations.

This tendency to set up special organisations to carry out functions originally assigned to the Trusts developed without any official encouragement, at any rate in the early stages ; but it reached very important dimensions, and the Trusts became almost exclusively limited in practice to the organisation and general control of the productive processes.

At the same time, there was one function, not originally contemplated as belonging to the Trusts, which they found themselves obliged to perform—the organisation and supervision of building operations. In the early period of the Trusts they were entirely concentrating on bringing existing buildings and plant into operation ; but when the pre-war level of production had been reached in 1927, and new construction became a condition for further expansion of output, every important Trust of necessity had to undertake and carry through building operations on a large scale. At a period of rapid expansion such as was taking place at that period this was a very substantial addition to the administrative burdens of the Trusts. The burden became so great that there was a tendency for the Trusts in an industry to combine in the formation of a special building company—such as the Textile Industry Construction Company. This is a further example of the tendency of the Trusts to throw off the direct management of all operations not immediately related to the productive process—a tendency which was healthy because it prevented the growth of an unwieldy apparatus and consequent bureaucratism within the Trusts.

The provisions for the distribution of profits of each Trust, which were vague in the 1923 Decree, became more precise in the 1927 Decree. In the first place provision was made for the setting aside of a certain percentage of the amount of the fixed capital as a depreciation

fund ; this allocation was made before the profit was arrived at—it was one of the regular charges on production and was covered in the calculation of production costs. The profit was then subject to the deduction of Income Tax (10 per cent.), and on the net amount thus arrived at there were several compulsory allocations. The first was an allocation of 25 per cent. to a special reserve for the extension of the enterprise (new buildings and equipment). The second was an allocation of 10 per cent. to the capital of the Bank for Long Term Credits to Industry. This allocation had the same general purpose as the reserve for the extension of the enterprise, but it was mobilised for the use of industry as a whole by being handed over to this special bank. The third allocation was one of 10 per cent. to the general reserve fund of the Trust, which is used to enlarge working capital as opposed to new buildings and equipment, which are provided for in the first (and in a general form also in the second) allocation. Thus 45 per cent. of the net profit after payment of Income Tax is compulsorily reserved in one form or another ; and in addition to these allocations, which apply to all sections of industry, Trusts in particular industries may be compelled to reserve further amounts for the extension of auxiliary industries, such as industries supplying their raw materials. These additional reserve allocations may be decided upon by the Supreme Economic Council or other Commissariat controlling the Trust.

There come next two allocations not of a reserve character. The first amounts to 10 per cent. of the net profit, and is for the purpose of improving the conditions of the workers employed by the Trust—especially by the provision of new houses. The second, the amount of which is not fixed, but which must not exceed one-quarter of

1 per cent. of the net profit, is for distribution as a bonus to the administrative and technical staff.

The balance left after all these allocations is paid over to the State Treasury and, together with the 10 per cent. Income Tax, forms part of the Budget revenue. Of the gross profit of the Trust (after provision for depreciation) approximately 50 per cent. is therefore brought into the State Budget, 40 per cent. is kept by the Trust as reserves, and 10 per cent. is used to improve the workers' conditions.

The fixing of precise percentage allocations in the 1927 Decree had the aim of raising the percentages kept by the Trusts in order to facilitate the accumulation of reserves, which was a necessary condition for the rapid extension of industry. The 1923 Decree had left the reserve allocations to be fixed for each industry and Trust by the Supreme Economic Council and the Commissariat for Finance ; and the result had been constant disputes between the Supreme Economic Council, which was anxious that the Trusts should build up reserves, and the Commissariat for Finance, which strove to draw in all available profits to aid the State finance of the current year. The new Decree fixed high percentages for reserve allocations and at the same time simplified the procedure of distributing the profits. The profit made by the Trusts and the division of the total between the Trusts (mainly for reserves) and the Treasury were approximately as under :

<i>Oct. 1 to Sept. 30</i>	<i>Total Profit (million £)</i>	<i>Kept by Trusts (million £)</i>	<i>Paid to Treasury (million £)</i>
1924-25	45	27	18
1925-26	63	35	28
1926-27	64	20	44
1927-28	74	35	39

These figures, however, only give the immediate relations between the particular Trusts and the State Treasury. A large part of the resources taken from the Trusts in the first instance was returned to industry in the form of Budget subventions to certain industries or provision of capital or additional capital to particular Trusts. To this extent the transfer of profits to the Treasury was only the machinery through which profits made in one industry were mobilised to help other sections of industry. In general during the period referred to the effect of these arrangements was to transfer the profits of light industry to aid the development of heavy industry. The financing of industry from the State Budget is worked by advances from the State to the Bank for Long Term Credits to Industry, and advances from this bank to particular Combines or Trusts.

The 1927 Decree made important alterations in the supervision of the Trusts. In the 1923 Decree there had been three controlling bodies—the Supreme Economic Council, the Board of the Trust, and the Control and Audit Commission. The new Decree completely abolished the Control and Audit Commission, which was objected to by the Directors of the Trusts on the ground that its personnel was frequently incompetent, its functions indefinite and its detailed enquiries useless. The Supreme Economic Council raised no objection to the abolition of the Control and Audit Commission for each separate Trust, and now the valuable part of the work formerly done by these Commissions is carried out by officials of the Inspection Department of the Supreme Economic Council.

Moreover, the functions of the Supreme Economic Council were more clearly defined by the new Decree than they had been in 1923, and in certain respects the Supreme Economic Council was given fuller power—in

correspondence with the tendency to revert to co-ordinated control, as against the outright decentralising tendency which had been dominant in 1923. Thus the consent of the Supreme Economic Council was required for any sale of property even if it was no longer of use to the Trust ; and its consent was also required for any leasing of property, any new construction or alterations in existing buildings and plant, and any withdrawals from reserve funds or borrowing of long-term loans. The appointment and dismissal of the Board of the Trust remained in the hands of the Supreme Economic Council, which was also given the right to veto the appointment of the Chief Accountant. Perhaps the most important new provision was the precise subordination of the work of the Trust to the plans laid down by the Supreme Economic Council, including the fixing of prices at which the Trust was to sell its products.

The functions of the Board of the Trust were again defined in a somewhat different form from the 1923 definition :

“ Under the general supervision of the institution to which the Trust is subordinated (usually the Supreme Economic Council or the Economic Councils of the separate Republics or the District Economic Councils), the Board directs independently the whole operative and administrative work of the Trust, managing its affairs and the property placed at its disposal and carrying through all transactions and operations connected with the management of the Trust (including the making of agreements and contracts) ; and it applies for the sanction of the institution to which the Trust is subordinated only in those cases in which such sanction is legally required.”

But in fact, even when the 1927 Decree on Trusts was being discussed, their position in the whole scheme of State industry was rapidly changing. Originally the central forms of organisation, they were being forced into a secondary position by the growth of the Syndicates which the Trusts themselves had created. They were losing power, too, in another direction—the enterprises or factories which they had been established to co-ordinate. The following chapters describe the rise to power of the Syndicates and the establishment of autonomy for the factories, thus leaving the Trusts as survivals of an earlier period, to be abolished or to have their functions changed in the next great reorganisation of industry.

CHAPTER IV

THE SYNDICATES

When the Trusts were first established as independent financial entities in 1921, they were given the general right (subject to limitations in particular cases) to buy the raw materials they required and to sell their products in the open market. The working capital with which each Trust started was mainly in the form of stocks of raw materials or manufactured goods, and in almost every case the Trust was compelled by its shortage of working capital to sell its stocks and new products as rapidly as possible, without very much regard to the price obtained. The result was inevitable—a general fall in prices, at a time when production was extremely disorganised and all costs were high. Through the competition to find buyers the various Trusts in each industry were brought into conflict, and the disorganisation of the market was rapidly growing worse. The tendency showed itself most clearly in the industries manufacturing articles of general use ; in the case of the heavy industries the same problem did not arise. But in the textile, tobacco and match industries, for example, the various Trusts could and did sell their products or stock at the earliest possible moment, in order to use the proceeds as working capital. While the cut-throat competition to sell was extremely harmful from a general standpoint, it nevertheless made it possible for production to go ahead. But as time passed it became evident that the Trusts were selling their products actually below the cost of production, and by the beginning

of 1922 the need to co-ordinate the buying and selling activities of the various Trusts began to be realised.

At the same time, all suggestions of a centralised system of buying and selling were rejected as being completely out of harmony with the new policy of decentralisation : it was argued that if the right to buy and sell were taken from the Trusts, their financial independence would be completely illusory. The solution was found by the establishment of "Syndicates," joint buying and selling organisations set up by the Trusts themselves and responsible to the Trusts, but at the same time functioning as co-ordinating bodies between the different Trusts.

In addition to the Syndicates, in the narrow use of the word as joint buying and selling organisations set up on a share basis by the State Trusts, there developed in certain industries a looser type of joint organisation—the Convention. Unlike the Syndicates, the Conventions did not aim at setting up a new distributive apparatus distinct from the Trusts and consolidating the former distributive apparatus of the separate Trusts. Though Conventions might set up their own permanent offices and staff, the work of the staff was limited : they had no commercial functions, and there was no capital to finance any transactions. The object of the Conventions was only to co-ordinate the commercial activities of the Trusts by agreements on the demarcation of areas for each Trust for the sale of products and purchase of raw material, to distribute work among the members of the Convention, to fix conditions of sale and purchase and to determine prices, ranges and standards. But the Conventions were only preliminary forms of organisation, and in the course of the three years after 1923 they were either liquidated or were transformed into Syndicates with operative functions.

It must be made clear that the formation of Syndicates was not due to any administrative decree. The Syndicates were thrown up gradually in industry after industry, as the result of independent attempts by the Trusts to solve their own problems. Membership of a Syndicate was purely voluntary, and the early Syndicates did not cover all the Trusts in each industry. But the advantages of membership were so clear that in 1929 Syndicates covered nearly the whole of State industry. In many cases Syndicates were formed for limited sections of an industry and in the course of time extended to other sections, or merged with other Syndicates. In a few cases Syndicates did not prove useful, owing to the nature of the industry, and these were liquidated. In his book on *Syndicates*, V. I. Kantorovitch gives a list of 49 Syndicates or other kinds of joint selling organisation formed between March 1922 and December 1927. Of these, 17 were formed in 1922, 7 in 1923, 5 in 1925, 7 in 1926 and 10 in 1927. But there is a considerable amount of duplication in this list owing to the reconstruction and merging of Syndicates ; only 25 separate Syndicates remained at the end of 1927, and only 20 in 1929. The most important of these were the Textile, Leather, Oil, Match, Timber, Metal, Engineering, Paper and Tobacco Syndicates.

In some industries joint selling organisations were developed for specific purposes, such as "Exportles," a company formed by the Timber Trusts for the export and sale abroad of certain of their products. But there was a steady tendency towards consolidating such intermediate forms into a definite Syndicate working as a permanent unit for all buying and selling operations.

The advantages of the Syndicate can be illustrated from the evidence given by the representative of the Gomza metal works at an enquiry held in 1924.

"The Syndicates arose quite naturally. When the Trusts came up against organised and centralised State purchasers of their products, they realised the need to form Conventions and Syndicates. The Syndicates were also required for sales in the general market. Before the Metal Syndicate was formed, Gomza used to sell its marketable products in Moscow only. The nails produced by the Trust never went further than Moscow. And when the Trust set up a few offices for the sale of its minor products, the energy required and the overhead expenses involved were excessive. By selling through the Syndicate the expenses have been reduced, and the nails are selling a thousand miles beyond Moscow."

Nevertheless, in certain industries Syndicates proved to be unnecessary or impossible. In June 1922, for example, a Coal Syndicate was formed ; it was liquidated within six months, and has never been revived. In the first flush of Syndicate organisation, the Coal Trusts had formed this Syndicate ; but they soon realised that the Syndicate was superfluous. Coal hardly enters the general market, being used mainly for the railways and industry. Owing to the economic importance of coal, the programme of production has always been laid down by the All-Union Supreme Economic Council, the price has been regulated, and the distribution has been made on a definite plan. In such circumstances a Syndicate has no useful functions. In other industries the units are so small and so scattered that the organisation of a Syndicate is too difficult, and it is partly unnecessary because the products of these small enterprises are sold only within a narrow radius, easily organised by the factory itself. Similarly, the proportion of the industry included in the Syndicate varied from

industry to industry. An industry in which there are only a few large Trusts is easily organised into a Syndicate for the whole industry ; but if there are both large Trusts and small enterprises, the Syndicate naturally covers only the large Trusts. It is not only a question of the difficulty of organising a Syndicate based on small enterprises : the fact is that small enterprises produce as a rule only for their own immediate neighbourhood and have regular clients, while large Trusts, producing for large regions of the Soviet Union, are properly brought into a Syndicate which can extend and at the same time regulate the areas of sale. Another factor is the type of product. The small enterprises produce as a rule special types of products, often of inferior quality ; this makes it difficult to bring them into a general scheme of distribution, because the larger buyers require standardised articles. And from the wider economic standpoint, the production—and consequently markets—of the larger enterprises must be increased at the expense to some extent of the smaller enterprises. The latter are uneconomic, and should not be given artificial respiration in the form of a Syndicate which preserves for them a share of the market.

Nevertheless, some of the Syndicates, while constituted only of the larger enterprises in an industry, actually helped the smaller non-syndicated enterprises by undertaking their buying and selling operations. This was done for example in the leather, match and metal-working industries, in order to ensure the fullest possible production and the best distribution through the country as a whole.

The internal organisation of the Syndicates was at first based on the sales organisation of the Trusts. Before the Syndicates were formed, each Trust had its sales department at the head office of the Trust, which sent or appointed representatives to handle transactions in the chief

areas where its products were sold. In some cases these representatives were salaried officials of the Trust ; but in many cases they were private traders, as the appointment of a private trader on a commission basis involved lower overhead expenses than the appointment of a salaried representative. When a Syndicate was formed, the central office of the Syndicate practically took the place of the separate sales departments in the various Trusts of that industry, or, where the sales departments were retained, they became only a connecting link with the Syndicate and did not themselves carry out commercial transactions. The Board of the Syndicate (elected by the Boards of the Trusts concerned) organised a central office, established routine machinery to link up with the Trusts, and then set about organising a sales apparatus. In many cases the first and easiest step was chosen—to work through representatives as the Trusts had done. The Syndicates therefore selected those representatives of the Trusts whom they thought most useful, and appointed them as representatives of the Syndicate. Even these measures effected considerable economies, by reducing the sales staff both at the centre and at the periphery ; and competition between representatives of similar Trusts, with its chaotic effect on prices and market conditions, was abolished. But the representatives were purely agents ; and gradually, with a developing industrial output, it became clear that a far more systematic sales organisation was required. The most energetic of the Syndicates—notably those in the Textile, Oil and Metal industries—were already in 1924 carrying out all operations through their own apparatus. In other cases, too, the apparatus of sale was being developed, and only a relatively small proportion of business was still done through the old system of representatives.

In the development of their own apparatus, the first step was the mapping out of areas of sale for the particular products of the Trusts forming the Syndicate. On the basis of this demarcation, "departments" were set up in each region, although the small working capital of the Syndicate made it impossible to cover the whole ground at once. Nevertheless, almost from the beginning of the Syndicates the results in decentralising the apparatus of sale were better than anything achieved by the Trusts. When the provincial departments began to function properly, not only the apparatus was decentralised, but also the actual movement of goods bought and sold. In the period when the Trusts had been conducting their own buying and selling, it was quite possible for a Trust in the south to be buying its requirements and selling its products through its representative in Moscow, who was dealing with representatives in Moscow of other Trusts, perhaps actually situated in the eastern region. A considerable amount of unnecessary transport might be involved, and owing to delays and uncertainties in distant transport there was a tendency to build up stocks of goods at the centres. The establishment of provincial departments led to the more systematic exploitation of the capacities of each area. The provincial departments of each Syndicate set about the rational organisation of sales in their particular areas. Provincial warehouses were established, the nearest Trusts were instructed by the Syndicate to deliver their products to these warehouses, and sales within the province were made through the provincial department, with deliveries from the provincial warehouse. The provincial department both relieved the head office of the Syndicate of a considerable amount of work, and accumulated detailed information of demand which enabled the Syndicate to build up a plan of

distribution for the products of the Trusts with a high degree of accuracy. Each provincial department was as a rule headed by a manager appointed by the Board of the Syndicate ; the manager worked under instructions from the head office, but had considerable initiative in developing sales within his area.

The Syndicates and their provincial departments handled only the wholesale trade ; they received the products from the Trusts, and sold them to smaller wholesalers or retailers, especially Co-operative Societies, to other Syndicates (purchasing raw materials or supplies for their constituent Trusts), or to State Departments.

A number of Syndicates opened offices in relatively small districts, and in 1924 and 1925 there was a tendency for the Syndicates to press the principle of local organisation too far. In certain cases, the Syndicates actually set up shops and entered into retail trade ; for example, in 1926 the All-Union Textile Syndicate had 22 warehousing provincial departments, 35 provincial offices, and 23 shops ; the total number of its employees was then 5,426. The result was that the organisation in some cases began to get too complicated. Side by side with the Syndicate's organisation there was the co-operative organisation of distribution. Primarily based on local consumers' co-operative societies, the co-operative system had built up its district and provincial unions of local societies, besides the great centralising union, the "Centrosoyus." Outside of the co-operative apparatus there were also the "Trading Companies"—share companies, formed mainly by the Governments of the separate Republics and as a rule handling a large number of different products drawn from local industries. In addition there were the private traders. The Syndicates had been originally formed to act as middlemen between the Trusts and the local distribution

machinery ; they were to bring order into the distributive system, and guide the products of the Trusts into the markets where they were wanted. The formation of the provincial departments of the Syndicates was merely a step towards bringing the wholesaler into closer touch with the retailer ; but to press further, to set up local wholesalers and even to enter retail trade, was merely to duplicate a machinery which already existed. The duplication involved to some extent actual competition with the Co-operative machinery, and the waste of effort and of stock in one area while other areas were quite inadequately covered.

This whole tendency was reversed from 1926, under instructions from the Council of Labour and Defence. At the end of 1925 over 8 per cent. of the local turnover of 16 Syndicates was through their retail shops ; this was the highest point reached, and by January 1927 their retail sale had fallen to only 3 per cent. of their turnover, many of their shops having been closed or handed over to the Co-operative Societies. In 1928 a special commission appointed by the Council of Labour and Defence reported on the general principles to be followed in distributive organisation : the following paragraphs are a summary of its recommendations. The reference to " State retail trade organisations " covers both the shops of the Syndicates and the shops of special trading companies set up by the Governments of the separate Republics.

" (1) All developments were to aim at the extension of both Co-operative and State distribution, with their organised and centralised methods, at the expense of private trade—' Special attention must be paid to the extension of Co-operative trading by means of substituting it for State trading, in those areas where, and

to the extent in which, Co-operation is in a position, with its own finances and organisational possibilities, to take the place of the State trading organisations ; provided that this does not hinder the flow of goods to the consumer and provided that the place left free by the State trading organisations is not taken by private traders.'

" (2) The State retail trade organisations, where they were kept alive, were to have the following special functions : (a) to ensure healthy competition, with a view to lowering prices between themselves and Co-operative Societies ; (b) to supply consumers with any classes of goods not supplied by the Co-operatives ; (c) to offer wide ranges of goods of the class they handled, to keep pace with the increasing production of the factories.

" (3) With these objects in view, the State trading organisations were to retain in existence ' a limited number of (retail) trading points ' in order to test this competition with the Co-operative Societies ; and they were also to maintain ' a number of control shops ' to try out classes of goods not handled by the Co-operative stores and to offer special ranges of goods.

" (4) In considering the closing down of existing State retail shops the essential factor was to be the financial and technical possibilities of the Co-operative Societies in each area, which must be in a position to supply the population with the kinds of goods formerly supplied by the State shops.

" (5) In the areas of autonomous national groups (Kirghizstan, etc.) where Co-operative development was weak, the State trading apparatus was to assume responsibility for meeting the requirements of the population."

Considerable progress has since been made in the transfer of retail trade to the network of Co-operative stores. The whole development of State retail trading was primarily due to the weakness of the Co-operative influence and organisation in many areas—the Syndicates set up their own shops in order to supply the population with goods which it needed but could not secure through the Co-operative stores. This applied particularly in the early period of the Syndicates. But with the development of Co-operation the need for State stores diminished ; they can still, however, serve a useful purpose as a check on Co-operative efficiency, as a guide to changes in demand for particular classes of goods, and as an advance-post for new products. But for such purposes only a relatively small number of State stores is required.

At the same time, certain Syndicates found it absolutely necessary not only to maintain but to extend their retail business, in view of the inability of the Co-operatives to handle the particular product offered by the Syndicate. The best example was the Oil Syndicate, which had to establish a very large number of stations for road transport which the Co-operative stores could not provide.

In general, however, the tendency in 1928 and 1929 was for the Syndicates to confine their activities to wholesale distribution as opposed to retail trading, and this tendency corresponds with the functions which they were originally expected to fulfil. At the same time, it corresponds with the building up of relations between the Co-operative system and the Syndicates which are of the very greatest importance in the growth of a planned system, not only of distribution but also of production. When the Syndicates were first formed, the Co-operative network of local societies, with district and provincial unions of societies, was merely one of the groups with which the

Syndicates had to deal. From the start, however, in accordance with the general policy of the Soviet Government, the Syndicates gave the Co-operatives "most favoured nation" treatment, offering them special prices and terms of credit. In the second period the Co-operative network became the most important client of the Syndicates, for the reason that it had become the chief retail machinery for bringing the products of the Trusts to the consumer. During this period, too, the demand for manufactured products exceeded the supply, and therefore the Co-operative Societies and unions developed the practice of placing orders with the Syndicates for goods which the Trusts were perhaps only beginning to manufacture.

The importance of these advance orders was quickly appreciated. Working to definite orders, the various Trusts were able to produce exactly the type of goods required and at the time required; transport and warehousing costs were reduced, because on completion the goods could be despatched direct to the point required; the time between production and effective sale was reduced, and all sales problems were made easier. Production difficulties were also lightened. In the preceding period the Trusts were working more or less blindly, producing the goods for which each factory was designed, in accordance with general plans confirmed by the Supreme Economic Council. Except in the case of industries producing a very limited range of goods, the plans were only a rough indication of what actual form the products were to take. In the textile industry, for example, no authority and no manager of a Trust or of a factory could be certain what kinds of cloth to produce. The tendency was to produce goods, and then hand them over to the Syndicates for sale. In the period when there was a general shortage of manufactured products this blind form of production did

not cause any difficulties, as the consumers readily absorbed what was offered them. But in every industry there were certain types of products which hung on the market, even if they were not completely unsaleable. Eventually the Syndicate would begin to realise this and bring it to the notice of the Trusts, but the reaction was too slow. The system of advance orders simplified the position enormously from the standpoint of the Trusts. The Co-operative Societies which placed the orders might themselves make mistakes, failing to realise early enough the changes in demand ; but, at any rate, the actual course of production was guided by those in direct touch with consumers instead of being largely a question of routine.

The system led also to the increasing efficiency of the Co-operatives in meeting the particular needs of each area. The District Unions of Co-operative Societies had previously bought in bulk from the Syndicates, and distributed the goods to the individual Co-operative Societies on the basis of the population covered. The whole of the initiative came from the producing Trust, or even the particular factory under the Trust. Goods of standard types were produced and handed over to the Syndicates ; the Syndicates sold them to the Unions of Co-operative Societies, and the Unions distributed them automatically among the Co-operative Societies. It naturally followed that stocks of one class of goods would be accumulating in the hands of one Co-operative Society while another Society not far away was completely sold out and the actual consumers were getting impatient at the delay in meeting their needs. The system of placing orders in advance reversed the position. The individual societies sent in their orders to the Union of Co-operative Societies, and the latter aggregated the quantities required and

placed the order with the Syndicate concerned, which in turn passed it on to the Trust, and eventually each factory received a definite instruction to manufacture certain goods for which a demand existed. The system had the immediate effect of developing the initiative of the Consumers' Co-operative Societies, making them think about changes in demand, and thus gradually bringing them into a key position in the whole planned system of production and distribution.

The system of placing orders in advance did not, however, develop suddenly, and at first it took the unsatisfactory form of "general agreements" between the Centrosoyus and the Syndicates. On the basis of these general agreements the Trusts could set to work, but the separate Co-operative Societies had no say in the matter ; the Centrosoyus at the centre merely covered their anticipated needs without any real touch with the consumers. The general agreements helped a little, but very little. The All-Union Textile Syndicate led the way in proposing to the Centrosoyus a more useful system, which was put into effect in 1928. It was based on the submission by the Syndicate to Centrosoyus of samples and quotations once a quarter. Centrosoyus passed these on to the lower stages in the Co-operative hierarchy, which replied with orders covering their requirements for the ensuing quarter. Centrosoyus passed on the orders to the Syndicate, at the same time agreeing the periods of delivery and terms of payment. But the orders from the individual Co-operative Societies were not absolutely definite. Centrosoyus gave a definite aggregated order to the Syndicate, and was obliged to accept delivery. But in order to retain a certain elasticity, which was necessary in view of the change of system and the inexperience of the individual Co-operative Societies, the deliveries for

the quarter were divided into three, and five days before the end of each month the Centrosoyus had to give detailed instructions to the Syndicate covering the deliveries for the following month. In the interval between placing the order and the month of delivery many of the Co-operative Societies would have revised their estimates of requirements, and the centralisation of their orders through Centrosoyus made it possible for orders to be adjusted without throwing into confusion the actual productive units—the Trusts and factories.

It is interesting to note that in connection with this system of “provisional orders” the Council of Labour and Defence, recognising the immense step forward towards planned production and distribution which the new system involved, made it compulsory for all the Trusts in the cotton, woollen and linen industries to dispose of all their products through the All-Union Textile Syndicate. This at once widened the area covered by the “provisional orders” system ; and since 1928 the system has been extended to a number of other industries manufacturing articles of consumption. It must not, however, be supposed that it has been possible to extend the system of provisional orders to cover all the products of the Trusts. The Co-operative network is still too weak, and there are still many areas not covered by it. But the system is undoubtedly of permanent value, and as it extends the work of planning production and distribution will be made easier on its most difficult side—articles of general consumption.

The organisation of distribution in the case of articles needed in the productive process itself—machinery and equipment, raw materials and supplies of all kinds—is a far simpler problem. It is particularly simple in Soviet Russia, for the reason that 90 per cent. of the demand

for machinery and equipment comes from State enterprises, already organised in Trusts and Syndicates and working on a definite plan over a number of years. At the same time, the organisation is not made simpler by the general form of the Trusts—their “horizontal” structure. In the case of most industries and areas each Trust and Syndicate covers only one type of enterprise ; the enterprises which produce raw materials or supplies are organised in totally distinct groups from those which manufacture the finished product. The process of sale of raw materials and supplies was therefore Trust—Syndicate—another Syndicate—another Trust. In the case of the “vertical” Trusts, embracing enterprises producing raw materials, semi-finished products and manufactured articles, the process runs from enterprise to enterprise within the Trust itself, and the normal selling and buying machinery is completely eliminated. There is, therefore, a certain tendency towards the formation of permanent agreements between enterprises producing raw materials and supplies and enterprises turning out the finished product. These agreements take the form of contracts, ranging over a period of years, for the supplies required.

In the case of certain supplies this can easily be done, and the result is a more or less settled production and sale of these supplies. In the case of heavy machinery the system of orders in advance is necessarily developed ; but there are certain forms of machinery and equipment which are constantly being needed at short notice—such items as spare parts, tools, etc. In such cases it is impossible for advance orders to be given, and the Syndicates had to realise the need to set up warehousing stations in order to have stocks at the points from which demands could most easily be met.

In all branches of industry, the Syndicates not only sold

the products of the Trusts, but also bought the equipment, raw materials and supplies which they required. Where the articles required by the Trusts were produced by other Trusts, the Syndicate's purchasing operations were very simple. But in some cases—notably the tobacco, leather and butter industries—the producers of the raw materials are scattered throughout the country, and a purchasing apparatus of considerable size had to be set up by the Syndicates in these industries. This work, however, was considerably lightened by the existence of the agricultural Co-operative Societies, which collect the products of a village or other area and sell them in a single block to the Syndicate or to the higher bodies in the Co-operative organisation.

The Syndicates carried out important functions in connection with the purchase of raw materials for the Trusts, apart from the actual process of collection from the producers. They played an active part in raising the actual output of raw material, in improving the quality and in the preparation of the raw materials for use by the Trusts. Thus, for example, in the tobacco, sugar and cotton industries the Syndicates, confronted by a shortage of raw material, organised special credit facilities to enable the peasants to extend the area sown with these crops. In many cases the Syndicates made advances to the peasants or to the village Co-operatives in the form of the manufactured products which they normally handled, thus effecting a form of credit barter.

The Syndicates in a number of industries which required raw material or equipment from outside Russia found it necessary to send representatives to the chief commercial centres abroad, thus developing an apparatus which would have been quite out of the question for the individual Trusts forming the Syndicate. The Textile and

the Leather Syndicates were important examples ; both of these were forced to throw off autonomous subsidiary companies to carry out their innumerable and complicated purchases abroad.

The formation of special companies to carry out certain sections of the Syndicates' work can be illustrated by the structure and connections of the Textile Syndicate which developed over twenty subsidiaries, most of which were formed in conjunction with the Textile Trusts or other organisations. The two subsidiaries carrying out distinct sections of the Syndicate's work were "Textiltorg," to which were entrusted all the retail shops of the Syndicate, and "Textilimport," which handled all the buying operations abroad. Then the selling operations in Siberia, Uzbekistan, Turkmenistan and Kirghiz were handed over to four companies, each serving one of the areas named. For the buying of raw materials within the Soviet Union a number of special companies were formed, to collect wool, flax, silk, etc., in various areas. One building company was formed, to undertake the erection of new textile factories ; and another company was set up to develop textile machinery construction. All of these companies were autonomous financial units, and in some of them the Textile Syndicate held only a part of the share capital ; but the Textile Syndicate had its representatives on their Boards, and their work was organised in close conjunction with the work of the Syndicate. The Textile Syndicate also participated in the share capital of the Industrial Bank and other special banks ; it made permanent agreements with the Dyes Trust which brought the latter almost into the position of a subsidiary. By 1929 the Textile Syndicate had become a vast organisation with specialised bodies carrying out sections of its work, but itself controlling and directing the whole of the

textile production and trade of the Soviet Union, including the purchasing transactions abroad. Such was the altogether unforeseen development of the first Syndicate, formed by some of the Textile Trusts in March 1922 with the immediate purpose of effecting economies in their sales organisation.

Many of the other Syndicates developed a similar far-reaching organisation, throwing off subsidiaries to relieve the administrative work at the centre. At the same time, the detailed work of the Syndicates themselves was simplified by the development of the Co-operative Societies and Unions of Societies. Both the selling and buying operations of the Syndicates tended to shrink at the periphery, step by step with the growth of the Co-operative organisations, which gradually took over the retail transactions and dealt with the Syndicates as wholesalers. Moreover, both in the selling and buying operations the Co-operative network itself developed centralised transactions. As we saw in the case of the system of "provisional orders," the Co-operative Societies centralised their orders for goods through the Centrosoyus, and the Syndicate tended to have no direct relations with the separate Co-operative Societies. A parallel process developed also in the purchase of raw materials: the village Co-operative Societies assembled the products, and they were sold to the Syndicates through the Centrosoyus or the specialised central Co-operative organisations such as those handling flax and butter.

Thus the Syndicates, while extending their functions and influence within their particular industry, were prevented from becoming unmanageable by the double process of contracting their apparatus at the bottom and throwing off autonomous organisations at the top. By the

end of 1929 the most highly developed of the Syndicates had become central directing bodies instead of merely middlemen without any important economic functions, as they had been originally conceived. The Syndicates, originally joint departments of the Trusts and subordinate to the Trusts, had proved to be the right administrative apparatus for controlling the Trusts, and the Trusts themselves had become almost superfluous middlemen between the Syndicates and the enterprises. And, on the other hand, the direct relations between the Supreme Economic Council and the Trusts, and its indirect relations with the Syndicates, had become completely anomalous. The time had come for a complete reorganisation of the administrative apparatus of State industry.

The lines of this reorganisation had been indicated by the actual development of the functions of the Syndicates and the controlling State authorities. In 1922 the purpose of the Syndicates was defined as

“the reduction of trading costs and the co-ordination of the sales apparatus of the separate Trusts, the assistance and regulation of the Trusts’ financial and trading activities, with a view to the rationalisation of the sale of the products of State industry and the more efficient collection of the raw materials and supplies required by it.”

The presidium of the Supreme Economic Council in July 1923 adopted a resolution embodying its view of the function of the Syndicates as follows :

“Syndicates must be given a place in the general organisation of State industry only in so far as they aim at regulating the financial and trading activities of the

Trusts and help forward planned distribution of products and collection of raw materials, and by these means reduce trading costs and co-ordinate the trading apparatus of the separate Trusts."

The Syndicates were clearly thought of as purely commercial organisations, whose only purpose was to reduce the costs of distribution of manufactured goods and collection of raw material—a joint organisation could work at lower costs and more efficiently than the sales departments of the separate Trusts. It was with this purpose that the Syndicates were formed, and it was along these lines that they began to work. The Trusts produced goods, and the Syndicates sold them, developing the necessary apparatus and constantly striving to reduce the costs of distribution ; and, on the other hand, the Syndicates bought the raw materials and other supplies needed by the Trusts, also effecting considerable economies as compared with the previous period when each Trust bought for itself.

The first stimulus to the Syndicates to widen their functions came with the realisation that some of the goods produced by the Trusts were not wanted by the consumers, either because they were of the wrong kind or because of their poor quality. At the meeting of all the representatives of the Textile Trusts included in the Textile Syndicate a year after its formation—a kind of annual meeting of shareholders, at which the Board of the Syndicate was elected—the Syndicate put forward a resolution which was adopted by the meeting, in favour of the closing down of "enterprises which, either because of their equipment or their general condition, are unable to attain a standard of production which would ensure a wide sale for their products on the market."

This resolution reflected the actual economic needs of the industry and of the country generally, and at once brought out the importance of the Syndicates in showing the Trusts what and when to produce. Formally, the Supreme Economic Council was the only authority which could take decisions to close works or issue any instructions to individual Trusts ; but in fact the Syndicates began to usurp the right to regulate not only the sales, but also the production of the Trusts. They treated this as a purely practical matter : their job was to sell, and they could not carry out that job efficiently unless the goods given to them for sale were of the type required by the consumers. Inevitably the Syndicates went further. The extension of sales depended not only on the type and quality of goods offered, but also on their price ; and by constantly insisting on this, advocating specialisation by means of placing certain orders with the most suitably equipped enterprises, assisting the re-equipment of out-of-date works by means of loans, and similar measures, the Syndicates gradually developed a definite and regular influence on production. Their actual influence was not founded on any Decree, but on the economic needs of the industry ; it was not expressed in formal instructions to the Trusts—which would have been in contradiction with the autonomy of the Trusts and the controlling rights of the Supreme Economic Council—but in contracts and agreements as between two autonomous concerns. In so far as any element of authority entered into the signing of these contracts, it was the authority of the larger economic unit over the smaller, of the organisation which knew the market over the organisation which was isolated from the market. A further important source of authority was the intimate connection between the Syndicates in each industry and the scientific institutions working on

matters connected with the industry. The Syndicates were constantly consulting these and drawing them into the work of the separate Trusts, getting them to advise new methods of production, specialisation, and other measures to improve the work of particular factories.

Considerable opposition was at first expressed to the tendency of the Syndicates to influence production. But the attitude of the Supreme Economic Council was purely practical. A special Committee set up by it to examine the activities of the Syndicates gave a clear statement of the facts with regard to the Metal Syndicate of the Urals region, Uralmet :

“ This Syndicate has exercised its influence on production, having been compelled to do this by the requirements of the market. With regard to this interference (in affairs of the Trusts) it can be stated that it has been entirely useful. A number of examples recorded in the reports of Uralmet and in the minutes of the meetings of representatives of the Trusts show that Uralmet compelled the Trusts to change their methods of working in order to ensure the more speedy execution of orders. At the same time, the work given to the factories became more rational and more in correspondence with the special productive possibilities of each factory. . . . The special conditions in which the Trusts of the Ural region had to work, their geographical proximity to each other and at the same time their distance from the centre and their interdependence on each other, led to their joint commercial organisation, the Uralmet Syndicate, developing into a kind of united metallurgical Trust leaving considerable autonomy to the subordinate Trusts.”

But the formal relations remained the same. The Trusts

had set up the Syndicates, and the Syndicates were servants of the Trusts, the Directors of the Syndicates holding office on the basis of election by the representatives of the Trusts. In relation to each separate Trust, however, the Syndicate was entirely autonomous, and the relations were purely commercial. Uralmet, the Syndicate referred to above, adopted a system of definite orders to the separate Trusts, which gave them an assured basis to work on and enabled Uralmet to fix exactly what each Trust was to produce over a certain period. Many of the Syndicates advanced money required for re-equipment to particular Trusts, on conditions which ensured the production of definite classes of goods.

In some cases the Supreme Economic Council itself insisted that the Syndicate should assume certain functions in the organisation of production as well as of sale. The Agricultural Machinery Syndicate, for example, was instructed by the Supreme Economic Council to carry through a plan of development for the agricultural machinery construction industry, and to work out plans for the standardisation of agricultural implements. In connection with the purchase of raw materials and supplies needed by their constituent Trusts the Syndicates went even beyond their own industry, and began to influence the production of Trusts whose output was required as raw material. Thus the Aniline Trust was virtually taken over by the Textile Syndicate, by means of an agreement whereby the whole output of the Trust's dyes was to be handed over to the Syndicate.

The relations between the Syndicates and the Trusts, however, continued to be on a purely commercial basis. When the Syndicates were first established they sold the products of the Trusts and bought the raw materials they required on a commission basis. Actually, owing to the

fact that the Syndicates were formed with far too little working capital, they frequently delayed payments due to the Trusts, retaining the money to extend their own apparatus. In the first two years after the Syndicates were formed the Trusts were constantly complaining of this practice ; and the Syndicates replied that the period before the money for goods was actually paid to them was unduly prolonged, owing to the general financial stringency. In many cases the Trusts effected sales direct with purchasers who could pay cash, in order to avoid the delay of selling through the Syndicate, and this reduced the effectiveness of the Syndicates' work in regulating sales. In 1923 and 1924 there was a considerable amount of controversy on the question of the Syndicates : their supporters urged that they had already justified themselves by bringing order into the distribution of the Trusts' products, while their opponents argued that the interests of the Trusts as producers and of the Syndicates as distributors could never be reconciled.

Actually, the financial difficulties which were the real basis of the dispute were largely solved by the accumulation of working capital by the Syndicates, out of the profit made on commissions ; and one by one the Syndicates began to pay the Trusts as soon as the goods were sold, and in some cases as soon as the goods were delivered to the Syndicates ; there were even cases of the Syndicates making loans to Trusts to enable them to produce certain goods. In 1924, according to Kantorovitch's book on *Syndicates*, only five Syndicates (including the Textile Syndicate) were still working on a commission basis, and paying the Trusts only after the goods had been sold ; in some cases they gave advances or bills of exchange as security for payment. The Syndicates actually paid the Trusts against delivery of goods as a general rule, on the

basis of definite agreed prices, keeping any profit made on the actual sale of the products, except in the case of the export trade, the profit on which was passed on to the Trusts.

In State industries, and with Syndicates set up by the Trusts, the exact distribution of profits between the Trusts and the Syndicates was not a very important matter. If a Syndicate made substantial profits on the sale of goods it had bought at fixed prices from the Trusts which owned its share capital and controlled it through elected representatives on its Board, not only were the profits eventually divisible among these Trusts, but also the Syndicate of necessity used the accumulated profits for the benefit of the Trusts—in the form of loans for extensions, advance payments against goods to be delivered, and general advances. For these reasons the tendency was away from a commission basis, and towards fixed-prices agreements between the Syndicates and the Trusts. The fixed-prices basis was of considerable advantage to the individual Trusts, which were able to prepare their financial estimates and bring their costs of production into proper relation with the agreed prices. This consideration also led to fixed-prices agreements in respect of the raw materials and supplies required by the Trusts, the Syndicates undertaking to secure the requirements and sell them to the Trusts at definite prices.

While, as indicated above, the exact distribution of profits between the Syndicates and the Trusts was not of substantial importance, the very fact that the Syndicates were purely voluntary organisations, with which any Trust in a particular industry could enter into relations or not at its own discretion, resulted in a general reasonableness in the actual agreements between the Syndicates and particular Trusts. If a Syndicate proposed fixed prices

below market prices, the Trusts need not accept the agreement and could sell their products direct to the Co-operative Societies instead of through the Syndicate. In fact, the only bargaining power of the Syndicates was their efficiency. On the basis of a centralised sales apparatus with connections ranging over the whole of the Soviet Union, the Syndicates were able to offer the Trusts better prices than they could themselves have realised. And when a Syndicate was inefficient, it naturally fell to pieces because it could not offer the Trusts better prices than they could themselves realise. Thus only those Syndicates which were efficiently run were able to show continuous development, with a record of new adhesions of Trusts which had at first refused to co-operate, and with an accumulation of profits made not by forcing down the prices paid to the Trusts, but through the economies of their centralised organisation of sales and purchase.

In the early days of the Syndicates, nevertheless, there were many disputes between them and individual Trusts, and all through the history of the Syndicates such disputes occasionally arose. The normal machinery for settling disputes (apart from purely commercial issues, which were usually settled by arbitration) was the reference of the matter to the general meeting of representatives of all the Trusts in the Syndicate. Charges of unfair treatment of a particular Trust would be raised in the general meeting, and the Board of the Syndicate would have to disprove the alleged facts or justify them. Or, again, the Syndicate would bring charges against some Trust of failing to maintain the agreed deliveries, or of setting up independent sales machinery which endangered the sales organisation of the Syndicate. In all such cases a settlement was generally arrived at through the general meeting of representatives of the Trusts, although the

meeting had no formal authority to decide any questions affecting individual Trusts. But the pressure of opinions expressed by the representatives of Trusts in the same industry was an important factor, especially as all the Directors of the Trusts, as well as the Directors of the Syndicate, held office only with the sanction of the Supreme Economic Council. In the event of the action complained of being continued, the matter might be brought to the notice of the Supreme Economic Council, with which the decision of the general meeting would naturally carry considerable weight.

In general, however, the Supreme Economic Council did not interfere with particular activities of the Trusts or the Syndicates, because the principle of the autonomy of these economic organisations had been laid down in the Decrees, and the central apparatus of the Supreme Economic Council had been cut down to such an extent that it was virtually impossible for it to interfere on detailed issues. The Syndicates and Trusts also were not anxious to invoke interference with their autonomy, and so, while the authority of the Supreme Economic Council could always be invoked on a wide question of principle, most disputes tended to find a settlement on the basis of economic sanctions. As already pointed out, a Trust which felt that it was being badly used by the Syndicate would simply leave the Syndicate if it could get no satisfaction ; and, on the other hand, the Syndicate could bring pressure to bear on any Trust by refusing to give it orders or refusing to buy supplies for it unless it maintained the stipulated deliveries, improved the quality of its products or desisted from independent sales of its goods. But every dispute of this kind, and the application of economic sanctions by one party or the other, interfered with the smooth working of production and

distribution, and often led to commercial activities which were quite unjustifiable on economic grounds, or at least hampered the growth of a planned distributive system. If the Trusts had been compelled to enter the Syndicates fewer disputes would have arisen ; and if either the Syndicates, or the general meeting of representatives of the Trusts, had had legal authority over the particular Trusts, the disputes would have been promptly settled. The principle of voluntary association and the autonomy of the separate Trusts was extremely useful in the early stages of the Syndicates ; it had compelled the Syndicates to justify their existence, and had prevented them from becoming unresponsive bureaucratic organisations. But when the Syndicates had become a permanent and all-pervading element not only in distribution, but also in directing production, the parallel authority of the Syndicates and the individual Trusts no longer served any useful purpose.

It began to be clear that a change would have to be made in their relations with each other or in their relations with the central controlling authority : either the Trusts would have to be subordinated to the Syndicates, or the Supreme Economic Council would have to become once again an active participant in the control of industry, giving specific instructions and settling by means of administrative orders all questions on which the Trusts and Syndicates were at loggerheads.

The second solution—direct interference by the Supreme Economic Council in current commercial questions—would have meant a return to the system of bureaucratic central management of industry and trade. The first solution—subordination of the Trusts to the Syndicates—was in principle more acceptable, as it corresponded with the situation which had in fact been created in those industries, such as the textile industry,

where the Syndicates had developed most successfully. But at the same time, the relations of the Syndicates with the central controlling bodies had to be reconsidered.

In the period 1922-23, when most of the Syndicates (in their original form) were set up, the only effective connection between them and the Supreme Economic Council was that the latter body had to confirm the appointment of the Directors of the Syndicate, who were elected by a general meeting of representatives of the Trusts concerned. Beyond that confirmation the Supreme Economic Council would not go, partly because of the general tendency against bureaucratic interference which was characteristic of that period, and partly because the importance of the Syndicates was not realised. All planning and administrative attention was concentrated on the Trusts, as being the productive units which were the basis of State industry. When the Syndicates grew in size and importance, and began to exercise a real influence on production as well as organising sales and purchases, several questions of principle were raised. Should Trusts be allowed to sever connections with a Syndicate? Should Trusts selling their products within a well-defined area be allowed to stay outside the Syndicate for their industry, simply because they could maintain their own sales apparatus at a relatively low cost? Should Trusts entering a Syndicate be compelled to sell *all* their products through the Syndicate?

The failure to appreciate the importance of the Syndicates, to which reference has already been made, for several years made the Supreme Economic Council refuse to give any decision on these points. It occasionally interfered when a large dispute had arisen, but in general its attitude was that all such questions must be settled by the free play of interests among the organisations

concerned. In adopting this attitude the Supreme Economic Council failed to take into account the functions of the Syndicates in a planned system of production and distribution. The formation of autonomous Trusts had been a necessary step towards a planned system of production, inasmuch as the Trusts were industrial units which combined and made simpler the work of controlling the smaller units—the enterprises or factories actually carrying out production. But the rise of the Syndicates was also a necessary step towards a planned system, because they in turn could combine the Trusts and thus further simplify the problem ; moreover, they united the Trusts not only with each other, but also with the consumers. They were, in short, the highest form yet reached in the organisation of Russia's productive system, and as such they should have been definitely supported by the Supreme Economic Council.

For some time the question was actually debated whether the Syndicates, as trading organisations, should not be brought under the control of the People's Commissariat for Trade. Fortunately this solution was rejected, but it was nevertheless essential that some central authority should interest itself actively in the building up of comprehensive Syndicates in each industry and in the work and policy of the Syndicates. The Council of Labour and Defence issued a number of general instructions, but for a long time no detailed supervision of the Syndicates was in force. With the preparations for the Five Year Plan, however, the importance of the Syndicates began to be understood. The system of provisional orders, adopted first by the Textile Syndicate, was recommended for adoption by all Syndicates ; and the Supreme Economic Council began to insist on the entry of the Trusts into Syndicates in every industry.

With the adoption of the provisional orders system, and the contraction of the Syndicates' apparatus which has already been described, the Syndicates had themselves undergone a very fundamental change. They had at first been sales and purchase organisations of an ordinary type, actually handling, through their own apparatus, the goods which they sold or bought. When the system of provisional orders was developed, for example in the textile industry, the Syndicate's retail trade and many other special activities had already been handed over to other financially independent organisations controlled in a general sense by the Syndicate, but independent in their current work. Even the work which still remained in the hands of the Syndicate itself was immensely reduced by the provisional orders system. The apparatus of the Syndicate no longer handled the goods which it sold or bought. It received orders from Centrosoyus, and distributed the orders among the Trusts. When the time came for delivery, it instructed the Trusts to despatch the goods in the quantities and to the addresses indicated by Centrosoyus. The Syndicate, in fact, had become a clearing-house for the industry, and not a sales organisation in the ordinary sense.

But parallel with the diminution in the volume of its sales work, the work of the Syndicate had grown enormously in the organisation and planning of production itself. It had become not merely a clearing-house, but also a directing and financial centre for the industry. It had become, in effect, a financially independent and non-bureaucratic organisation carrying out the functions which it was originally intended should be carried out by the Chief Committees or "Glavki" under the Supreme Economic Council. Experience had shown that the bureaucratic Glavki were not the right form of organisation

for the control of industry ; and experience had shown that the Syndicates could do the work efficiently—in fact, had been doing the work, almost unnoticed, for a number of years. The conclusion was inevitable : to link them up with the Supreme Economic Council in such a way that general centralised control would be assured without interfering with their financial independence.

CHAPTER V

THE FACTORIES

IN the first period of the revolution the management of the nationalised factories, as we saw in Chapter I, was usually in the hands of the factory committee or a Commission or individual manager appointed by the factory committee. With the establishment of the Supreme Economic Council the powers of the factory committees were considerably curtailed, and the managing boards or individual managers were appointed by the appropriate industrial section or Chief Committee of the Supreme Economic Council, the factory committee only participating in the appointment through the trade union organisation. With the creation of Trusts, the appointment of factory managers passed naturally to the Boards of the Trusts, subject only to the same formal consultation with the appropriate trade union organisation.

But the relations between the manager of a particular enterprise and the Board of the Trust of which it forms a part have undergone considerable changes, especially in the larger concerns. In the first place, the enormous size of the Trusts made it quite impossible for the Boards of the Trusts to manage the detailed operations of all the enterprises of which a Trust is composed. This involved increased responsibility for the managers of the particular enterprises, and it became necessary to define the respective functions of the Boards of the Trusts and of the managers of the various enterprises under their control.

The most important principle established in recent years is independence of the "productive unit." Just as the Board of a Trust is appointed by the Supreme Economic Council, which has no right to interfere in the detailed work of the Board after its appointment, so the Board of the Trust appoints the manager of the factory, but has no right to interfere in his actual management from day to day. Moreover, while at first the factory was regarded merely as a section of the Trust and was not an independent financial unit, each factory is now in principle an independent financial unit, which quotes production prices to the Board of the Trust and works on the basis of definite orders placed by the Trust. At the same time, the financial independence is very far from complete. The factory has not any separate capital, and is dependent on the Trust (or Combine) to supply its weekly financial needs, on the basis of a budget which has to be approved by the controlling Trust or Combine. The important point is that the principle of separate financial responsibility has been introduced ; separate accounts are kept by each factory, and the manager tries to show a profit on the work done—a profit which represents the difference between the estimated cost of production, as approved by the Trust, and the actual cost of production.

The whole tendency is in favour of breaking down any growth of bureaucracy in the administration of industry, and placing full responsibility on the managers of the separate factories, in order to ensure the fullest development of initiative in the actual productive unit. The 1927 Decree on Trusts even gave "productive units" the right to buy and sell independently of the Trusts ; but this provision was seldom used in practice, owing to the fact that the most efficient purchase and sales organisation was the Syndicate, acting for the Trust. The normal practice was

for the Trust to give orders to the particular factory, receiving orders in return for raw materials and other requirements which it passed on to the Syndicate for execution.

In practice, the independence of the factories consisted mainly in the fact that their relations with the Trust were those of a distinct economic unit, with a definite plan of work and separate accounts and the right to receive from the Trust a definite amount of working capital. Moreover, the manager of the factory had the absolute right (in relation to the Board of the Trust) to appoint or dismiss his own administrative or technical staff and to take on or dismiss workers. Technical or manual workers dealt entirely with the manager of the enterprise, and not with the Directors of the Trust.

In the preparation of plans of work, in discussions regarding the extension or requirements of the enterprise, and similar general matters, the manager of each productive enterprise had the right to "participate," though the decision lay with the Board of the Trust. In current work, the manager of each productive enterprise was given an order for certain products on the basis of production costs quoted by him; this took the form of a definite contract with precise stipulations regarding price and term of delivery, quality, etc., as binding on the manager, and precise stipulations as regards finance, raw material, supplies, etc., as binding on the Board of the Trust.

The internal organisation of each factory or productive enterprise varied in accordance with its size, compactness, form of production, etc. It is obvious that the simple form of organisation possible in a small factory, in which almost all questions are settled directly by the manager, is quite impracticable in an enterprise employing five or ten thousand workers engaged on various types of products.

Nevertheless, there are certain general forms of organisation which apply throughout Soviet State enterprises. The manager is always the sole person ultimately responsible in all questions of supply and production, labour and finance. The enterprise is always working on the basis of a plan laid down by a Trust or other higher economic unit or institution. And the workers in the enterprise are always expected to keep themselves informed of the economic position of the enterprise and to interest themselves in the methods of production and in all matters relating to production, including costs.

In the larger factories and enterprises certain functions of management have been transferred for detailed attention to departments in charge of experts. In particular, a "planning department" frequently exists; its function is to rationalise the productive process and to make precise arrangements for the different stages of production. There is usually also a separate accounting and finance department, which undertakes the work of calculating costs as well as carrying out current financial transactions. Another important department is the labour department, which arranges all engagements and dismissals, allocation of work, and similar matters. The establishment of these departments lightens the burdens of management and ensures that proper attention is given to important questions; but at the same time the departments are purely aids to the manager, who has the last word on all questions. The instructions on the internal organisation of productive enterprises, which were issued by the Supreme Economic Council on January 31st, 1929, provide that every productive enterprise must have, in addition to the manager, assistant managers to deal with technical questions and with labour questions.

Every enterprise employing more than twenty-five

workers is obliged by law to have a factory committee. Primarily the factory committee functions as the basic unit of the trade union organisation, carrying out all normal trade union work, protecting the economic interests of the workers, supplying their cultural needs, and seeing that labour regulations or agreements are observed by the manager of the factory. But the factory committee has also "managerial functions" up to a certain point. In the first place, it indirectly participates in the appointment of the manager of the enterprise. The Board of the Trust makes the appointment only after consulting the appropriate trade union organisation, of which the factory committee is the basic unit. In practice this means that an objection by the higher trade union bodies (local, district or central, according to the importance of the enterprise) constitutes a definite veto ; while a properly qualified candidate put forward by the factory committee, if supported by the higher trade union bodies, is certain to get the job. In the same way a factory committee, acting through the trade union, can secure the removal of a manager.

After a manager is appointed, the factory committee has no right to interfere with or in any way obstruct his orders, so long as they are legal and do not violate the existing labour agreement. But it has the right and the duty to participate in the settlement of all important questions affecting the activities of the enterprise ; to participate in the engagement and dismissal of workers in accordance with the Labour Code and the existing labour agreement ; and to keep the workers informed of the economic position of the enterprise.

The factory committee is elected at a general meeting of all the workers (technical and clerical as well as manual) on the following basis :

THE FACTORIES

<i>Enterprises with</i>	<i>Number on factory committee</i>
25 to 100 workers	3
100 to 300 ,,	5
300 to 1,000 ,,	9
1,000 to 5,000 ,,	13
over 5,000 ,,	15

The factory committee holds office for six months ; its expenses (covering the organisation of clubs, libraries, sports, etc., for the workers) are covered by an allocation from the funds of the enterprise, amounting to 2 per cent. of the total wages bill and paid over when the wages are paid.

The duty of the factory committee to keep the workers informed of the economic position of the enterprise is carried out by reporting on the subject to the general (or shop) meetings of workers, and in particular to the "production conferences." The aim of these reports is to associate the workers as closely as possible with the work of management, by giving them full information about the enterprise as a whole, its activities and plans for the future ; and drawing from the workers suggestions and proposals on the organisation of work, methods of production, and all other matters affecting production.

The association of the workers in each enterprise with the general work of management (apart from the appointment of the manager and protection of the workers' interests in relation to the management) takes four forms :

(1) The "suggestions bureau" for considering suggestions of new methods, better organisation, etc. ; in a large enterprise this is a permanent department, regularly receiving suggestions from the workers and reporting on them to the management ; (2) Commissions composed

either of workers nominated by the factory committee, or including such workers, to investigate particular questions ; (3) Conferences of representatives from several factories in the same industry or in the same area, to discuss some question of general interest ; (4) Production conferences.

Production conferences are of special interest in that they are not limited to a few workers, but are meetings of all the workers in a factory, or in a section of a factory or enterprise in the case of very large concerns. The manager is obliged to be present and to make a report, and the factory committee also submits a report and gives a lead on the important issues contained in the manager's report. In large enterprises it is usual for the production conference to appoint a special commission, composed partly of members of the factory committee and partly of other workers, to investigate in detail all questions raised, to see that suggestions made at the production conference are actually considered by the manager, and generally to prevent the production conference from becoming a mere formality. The production conferences, in any case, have no administrative powers, and resolutions or proposals adopted by them are not formally binding on the manager. Nevertheless, where the factory committee is active no manager could ignore such proposals ; and if he considered them impracticable he would have to report his reasons to the special commission or to the next production conference.

It is true that the production conferences are not yet functioning regularly or very effectively. In a report on the rationalisation of industry, issued in 1928, the Supreme Economic Council states :

“ The conferences to draw in the mass of the workers

into economic work have shown, on the basis of experience, that they are on the right lines and that they are living forms of organisation, but in practice they have not attained sufficient development. There is to be observed a certain tendency to substitute production commissions for production conferences ; production conferences in which the mass of the workers participate are held infrequently and irregularly ; in many enterprises they are held only once or twice in a half-year, while the commissions, composed of a much more restricted group, sit dozens of times and assume functions properly belonging to the production conferences. As a result, the working masses, in spite of their colossal experience in production, remain separated from the actual questions connected with the productive life of the enterprise in which they are working, and do not participate in the work.

“ A characteristic feature of the work of many production conferences is the lack of method in their approach to particular problems, the lack of system in working out fundamental measures for the rationalisation of production ; another feature is that the general mass of the workers does not receive sufficiently systematic information on the result of the work of production conferences—as to whether their suggestions have been put into operation, whether they will continue in operation or what difficulties have arisen to prevent their adoption. As a result, in many enterprises the workers have become to some extent indifferent to the work of the production conferences ; their desire to put their experience at the service of the enterprise has weakened ; and for these reasons the attendance of the workers at the production conferences is still relatively small.”

The Central Committee of the Russian Communist Party, in a resolution adopted in April 1928, recorded the weakness of the production conferences and urged greater attention to their work :

“ The extent to which the masses have been drawn into the work of organising production is completely inadequate. The information in the possession of the workers regarding the plans and actual course of production is often of a formal character ; questions relating to production, rationalisation, capital development, etc., are not worked out in the production conferences, and in some cases workers are even penalised for criticising defects in the administrative work. The trade unions are not working systematically to raise the importance of the production conferences ; the conferences are badly organised, infrequently called together, and their work is ignored by the technical staff—and sometimes even by Communist managers ; while there is a lack of the control required to see that decisions of the conferences are put into effect. . . . The attitude towards economic work is completely unsatisfactory in the trade unions, both in their district committees, their provincial departments, their central committees, and the inter-union organisations ; especially on the issues of participation in questions of capital construction and rationalisation of production, in taking measures to reduce costs and to control the work of the production conferences.”

For these reasons it was decided to initiate a campaign, through the Party and the trade unions, to develop the work of the production conferences and to draw the attention of all trade union organisations to economic work generally. The campaign appears to have had

considerable success, particularly in connection with the Five Year Plan, which has fired the imagination of the workers and brought them to take a more lively interest in matters of organisation and administration in the factories. Nevertheless, the economic work of all trade union organisations, including the factory committees and the production conferences, is purely consultative and advisory ; they have no authority to instruct the manager or to interfere with the current work of administration.

The tendency throughout industry is to centralise all questions of management in the hands of a single individual, who always has the last word on all issues ; but there is also a decentralising tendency within each enterprise. In the first place it is now customary, in large enterprises, to have four sectional sub-managers, one for production, one for commercial operations, one for buildings and equipment, and one for labour questions. The work of the production manager covers the preparation of plans of production as well as the actual process of production ; he is assisted by a chief engineer and by the heads of the different workshops. The commercial manager controls buying and selling operations (now actually arranged through the Combines), warehousing, and accounting and finance. In addition to the sub-managers, there is usually a technical committee, composed of the leading members of the technical and administrative staff. While, therefore, there is increased centralisation in so far as a single manager has taken the place of a managing board, the actual functions of the manager tend to be decentralised.

A further tendency towards decentralisation shows itself in the form of placing individual sections or workshops on a separate accounting basis. It will be remembered that although the Trust centralised all the finance

of the factories covered by it, each separate factory was placed on an independent financial basis, in order to ensure economic working. In the same way the economic efficiency of the departments or workshops covered by a "productive enterprise" has been increased owing to the fact that they too have been put on an independent financial basis. In the new system of organisation of State industry which was introduced in 1930 these tendencies are given full play, and the individual enterprise or factory has become an organising unit over autonomous workshops or departments—all of which, however, are working on a definite plan of production laid down by the higher economic authorities.

CHAPTER VI

THE CONTROLLING BODIES

The administrative apparatus of Soviet Russia's industry has been built up in order to make possible a system of planned production and distribution, a "single economic plan" through which the development of Russia's resources can be guided and balanced from year to year. The guiding principles are necessarily laid down, not by the actual administrators of industry or by any purely economic body, but by the central *political* body of the Soviet Union—the Congress of Soviets. The Congress of Soviets is composed of delegates from the Town and Provincial Soviets, which are themselves composed of delegates from the factories, wards and districts, "counties" and smaller towns. The Congress is elected annually, and has before it a series of reports and resolutions indicating lines of policy, which it either accepts as they stand or amends through the machinery of special committees. The reports and resolutions are prepared by the various Government Departments, in accordance with general lines of policy agreed on by the Council of People's Commissaries. The Council of People's Commissaries itself, in formulating its policy, follows general directives laid down by the Communist Party of the Soviet Union.

Although, owing to the difference in structure and methods of election, no exact parallel with institutions in other countries is possible, the directing machinery of

Soviet Russia's policy can be said to be similar to the machinery in all other countries : the dominant political party decides the main lines of policy, which are elaborated by the various Government Departments and agreed on as a whole by the Government ; and the Government then lays the general proposals before the representative assembly for adoption or amendment.

This is the machinery through which the economic policy from year to year and over a series of years is determined. The Communist Party makes the vital first decisions, which are then elaborated by the Government and adopted or amended by the Congress of Soviets, or the All-Union Central Executive Committee which it elects. It is from this point onwards, in the actual administration of the adopted policy, that this book is specially concerned ; but it is not possible to appreciate the working of the administrative machinery without some description of the vital part played by the Communist Party, not only in the preparation and adoption of the " single economic plan," but also in carrying through the plan after its adoption.

The basic unit of organisation of the Communist Party is the " factory cell "—the group of members of the Party working in a particular factory, depot or department. There are also groups uniting on the basis of the street or area where they live, members of the Party who are not employed in large factories ; and there are " village cells " in the countryside ; the various " cells " send delegates to town, district and provincial organisations of the Party, and these in turn send delegates to the Party Congress representing the membership throughout the Soviet Union. The Party Congress elects the Central Committee, which holds office until the next Congress.

The Party Congress is preceded not only by discussions

within the cells and local organisations, but by a very detailed discussion in the Press, in which proposals of policy for the ensuing year are set out in detail and criticised ; while the statistical and other material bearing on each question is also published. When the Congress assembles, proposals are laid before it by the Central Committee ; members of the Government report on the work of their Departments and on general issues ; and the concrete proposals are discussed and amended by the Congress, the more important issues being examined and reported upon by Committees. The reports and decisions are published in the Press and explained and discussed throughout the organisations of the Party, and again explained by members of the Party to the non-Party workers and groups at factory meetings, village meetings, meetings of trade union and Co-operative organisations, etc. This whole process of economic explanation and education through the Communist Party organisation is, in a sense, outside the administrative machinery of Russia's productive system, but it plays a vital part in the carrying through of economic policy from year to year.

But the economic function of the Communist Party does not end with this preparatory work. When the detailed application of the adopted policy is worked out by the Government Departments and the corresponding economic institutions—the Trusts and Syndicates (now the Combines) and Co-operative bodies—the function of the Communist Party cells in the particular factories or villages is to see that the instructions are put into operation, to call attention to defects and shortcomings, to make special efforts to overcome difficulties that arise, and generally to get the work done in accordance with the plan. The Communist Party cell works, as a rule, through the economic organisation itself—that is, through the Party

members on the factory management or Board of the Trust or other body concerned—and through Party members on the factory committee and other parts of the trade union organisation. But when necessary the Communist Party cell also has access, through the Party machinery, to the higher economic and trade union bodies, and is thus able to a considerable extent to overcome bureaucracy and indifference in regard to defects and unforeseen difficulties, and to act as a continuously stimulating force on the economic life of the particular factory or area. Through the whole period of the taking over of the factories, the civil war and the subsequent reconstruction, the Communist Party organisation gave the initiative and local stimulus to economic developments, and, with its now experienced membership spread through the important posts in all economic institutions, the Party continues not only to give the guiding lines, but also to direct and control the carrying out of the economic plan. The Party machinery is distinct from and independent of the administrative machinery of production, but it interlocks with it at every important point, and automatically comes into play whenever the normal machinery fails to function.

The administrative machinery itself is necessarily complicated, but the purpose for which it has been built up—the carrying through of a single economic plan—gives it certain general features which can easily be distinguished and described. The organisation of production and distribution in a country so vast in area and with such varied resources is an immense problem. The organisational structure has not only to secure steady and increasing production in all branches of industry, but has also to ensure a balanced development as between the different branches. The central, co-ordinating machinery is therefore the

pivot on which all production turns. This central body must know not only the productive capacity of the coal, oil, metal, chemical, textile, timber, paper, building and other industries, but also the requirements of these industries in raw materials and equipment. And it must take into account the requirements of the workers and peasants in food, clothing and even entertainment and sport ; it must maintain a balance between the needs of manufacturing industry and of agriculture ; it must investigate import needs and the possibilities of export. Moreover, it must plan not only for a year, but for several years ahead, in every aspect of its work. This central body is the Council of Labour and Defence, with its specialised section, Gosplan, the State Economic Planning Commission, a Department set up by the Council of Labour and Defence during the civil war, and established as a permanent central organisation by a Decree of the Council of People's Commissaries on February 24th, 1921. In the decree on Trusts issued in 1923 Gosplan was mentioned as the body charged with the preparation of a general plan for the whole economic life of the Soviet Union. The planning work of the Commission covers three periods—the Annual Plan, the Five Year Plan, and a more general plan showing the course of development beyond the five years. The Annual Plan is itself one section, in full detail, of the Five Year Plan ; it is the basis on which all economic organisations work during each year. The Five Year Plan indicates the further development beyond the current year, and is of special importance in the planning of capital extensions—the erection and equipment of new factories, etc., on which work may have to start in one year, but may not be completed for two or three years. The general plan, covering development beyond the five years, gives an indication of still further capital extensions,

especially in connection with the building of power stations.

The central office of Gosplan is in Moscow ; it has now a wide network of offices in the capitals of the various Republics included in the Soviet Union and in each important industrial area. Gosplan has no administrative functions ; its work is solely to elaborate plans of production and distribution, following the general principles laid down by the Government, and on the basis of the statistical material and reports which it receives from its own sub-offices and from every economic institution throughout the country. The work is continuous : it is not merely a question of preparing a plan, but of recording the extent to which the plan is carried out, and on the basis of successes or failures in particular sections of industry or particular areas new plans must be worked out, continuously taking advantage of successes, stimulating production to make up for partial failures, and generally modifying plans in accordance with the requirements of the situation.

After approval by the Government, the plans or modifications of plans are sent out to the administrative institutions as definite instructions to be put into operation, so far as State industry is concerned, and as statements of the anticipated volume and kind of products to be handled so far as the State trading organisations are concerned. But the plans do not descend arbitrarily on the institutions which are to carry them out : they are not the abstract inventions of Gosplan. Just as the Budget estimates for each British Ministry, although submitted to the Treasury and the Cabinet before adoption, are actually prepared by the Department concerned, so the production and distribution plans in Soviet Russia are drafted by the various institutions, and every modification of the

draft plan which Gosplan considers necessary in order to ensure the right balance between the different industries, or in order to make possible some desired development, is discussed with the institution concerned. The result is co-ordination of actual possibilities, not the mere formulation of an abstract scheme. The degree of effective co-ordination has increased year by year, not only because the machinery itself has acquired greater precision, but also because the proportion of Russia's production and distribution which is directly controlled by the State is increasing from year to year. This means that the elements in the production budget which cannot be directly controlled are becoming of less importance each year. Even these elements—the output of privately controlled workshops and of small producers generally—can of course be estimated, and, in fact, are estimated and included in the production budget for each year. But it is far from easy to compile accurate statistics of the output of small producers, and there is necessarily a large margin of possible error in this part of the production budget.

Over and above the possible statistical errors which are due to the existence of small and unorganised production, there are two general factors which may give rise to important errors in the production budget. One of these arises out of the existence of production in private hands : it is the general reaction of the private producer to particular legislative or financial measures. In this respect the most sensitive economic section is agriculture. Taxation or fluctuations in prices have repeatedly affected the area sown by the *kulaks* or relatively large-scale farmers. Sometimes it is a question of the *kulaks* over a wide area sowing grain instead of cotton or flax ; but it is an even more serious factor when the operation of the Government's policy is met by a reduction in sowings in general. This

factor, however, is to a certain extent calculable ; and, on the other hand, the Government's policy aims at avoiding sharp conflicts which would seriously affect the sowings. At the same time, as in industry, so in agriculture, steady progress is being made in the conversion of individually worked farms into "collectives" which are linked up with the Co-operative organisations and can thus be brought with more precision into the national economic plan. The "Collectivisation" programme is itself included in Gosplan's scheme.

Then there is the incalculable factor of weather. A poor harvest would throw out all calculations, even if not only industry but also agriculture had been completely brought under State or Co-operative management. Even in this respect, however, it is possible to do something to minimise both the menace itself and its possible consequences. Thus an important part of the economic planning work has concentrated on preventive measures—the improvement of irrigation, the selection of hardy seeds and crops relatively little affected by extremes of drought, moisture or cold, and similar measures ; while a form of insurance is also provided for in the plan, by the creation of reserves of grain, the construction of new railways to link up rich grain areas with areas specially subject to crop failures, and the general provision of financial reserves which can be thrown in to aid any specially threatened area. Thus the work of Gosplan is gradually becoming more effective, and the factors tending to disturb the economic plan are gradually being eliminated or offset by measures of prevention or insurance.

Taking the Council of Labour and Defence, with its planning department Gosplan, as the centre of Russia's productive system, the directing lines lead in three main directions—to the Supreme Economic Council as the

link with State-owned industry ; to a group of People's Commissariats (State Departments) which exercise special economic functions ; and to the Central Unions of Co-operative organisations. Almost all of the People's Commissariats are in some way involved in the production system, in the sense that their work has to take account of economic developments and at one point or another actually impinges on the productive system. Thus the Commissariat for Education not only depends on the production budget for its finance and for the extension of schools and other buildings, but is also guided in its work by the requirements of an expanding industry for specialists, technical workers and specially trained workers of all kinds. The Commissariats for War, Posts and Telegraphs, Labour, Health, and Social Welfare are all similarly involved in this plan. But the Commissariats which have direct economic functions are three in number—Finance, Trade and Transport ; the Commissariat for Agriculture has some economic functions, but of a less definite type.

The Commissariat for Finance is responsible, like the British Treasury, for the State's finances—the collection of taxation and other revenues, and the issue of money to other State Departments in accordance with the approved Budget. But the work of the Commissariat for Finance is far wider than the work of the British Treasury. This is not merely because a substantial part of the revenue consists in the profits of State industry and that a portion of the Budget expenditure is directed to the building up of State industry. The whole of the banking system of Soviet Russia is controlled by the Commissariat for Finance in much the same way as the Supreme Economic Council controls State-owned industry. And the single economic plan prepared by Gosplan lays on the Commissariat for

Finance the duty of financing the industrial and commercial operations involved in the plan.

This financing is done mainly on ordinary banking lines, through the provision of temporary credits based on the banks' own resources and the deposits of their clients ; in addition, certain long-term loans are made for capital development in certain industries, the money being provided through the State Budget or raised through the State issue or guarantee of loans, issued both within and outside of Soviet Russia. The central bank is the State Bank, established in November, 1921, and managed by a Board appointed by the Commissariat for Finance. A number of other special banks have been formed, such as the Industrial Bank (now the Bank for Long-Term Industrial Credits), the Bank for Foreign Trade, and the Co-operative Bank ; but these are all closely controlled by the State Bank, and have been formed to carry out special functions within the single financial plan directed by the Commissariat for Finance. Each bank, however, is financially independent, and operates independently in just the same way as the various industrial units operate independently.

The Commissariat for Transport now controls all the railway, shipping and road transport owned by the State, through financially independent organisations of a type similar to the industrial units under the Supreme Economic Council ; the general organisation of transport is described in Chapter IX.

The Commissariat for Trade (originally two Commissariats, for Home and Foreign Trade) controls a number of general trading concerns, including general trade agencies abroad, each of which is financially independent and carries out its operations on a commercial basis ; it now also controls a number of the new

Combines dealing with agricultural products. In the case of the former Trusts and Syndicates (set up under the Supreme Economic Council) with their own trading organisations abroad, the Commissariat for Trade exercised a general supervision over their foreign operations, but did not itself appoint their Boards of Directors or otherwise directly control them. This holds good of the present operations outside the Soviet Union of the new Combines and their subsidiary companies abroad.

In earlier chapters the functions of the Supreme Economic Council at various stages have been described. Its structure and its relations with industry in the first period—from 1917 to 1920—were extremely simple in general form. With the presidium of the Supreme Economic Council as the controlling and co-ordinating body, there were three main groups of Departments, covering (1) central internal organisation—general management, finance, planning, etc., within the head office ; (2) central external organisation—to maintain contact with the provincial and local economic councils, which were controlling local industry under the general supervision of the Supreme Economic Council ; (3) administration of industry, divided into departments dealing with separate industries. The control of the factories was effected through two channels—directly, through the central department for the industry, and indirectly, through the corresponding department of the provincial or other local economic council. During this period the general structure remained unchanged, but the departments for the administration of each industry necessarily developed a highly complex internal organisation to enable them to administer the great mass of separate enterprises within the industry.

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In the second period, from 1921 to 1927, the administrative apparatus of the Supreme Economic Council was heavily cut down. The Industrial Planning Department ("Promplan") developed. The Department of Economic Administration directed the general reorganisation of State industry, and issued regulations governing its activities. The operations of the Trusts were controlled by the Central Administration of State Industry, a department built up on the Glavki or Chief Committees for each industry; these were, however, reduced in number and lost most of their administrative apparatus. There were nine such Glavki, for the Electricity, Metallurgical, Engineering, Non-ferrous Metals, Fuel, Chemical, Timber, Textile and Food industries. Each of these Chief Committees had sub-offices in the separate Republics forming the Soviet Union, and there were local offices in each province.

In the third period, from 1927 to 1929, the Syndicates in each industry were carrying out almost identical planning functions as the Glavki, in the ordinary course of their work as centralised buying and selling organisations for each industry. Moreover, the Trusts, originally formed to manage groups of factories, lost many of their functions to the Syndicates, and other functions to the particular enterprises which they controlled—for the decree of 1927, instructing that each enterprise was to be put on an independent financial footing, gave full responsibility for management to the manager of each enterprise. The main operating functions were carried out by the Syndicates and the individual enterprises; the Chief Committees of the Supreme Economic Council were completely removed from production, and the Trusts were only controlling and co-ordinating groups of autonomous enterprises.

The fourth and present stage began in 1930, following

on a resolution of the Central Committee of the Communist Part of the Soviet Union, adopted on December 5th, 1929 (see Appendix I). This resolution, on "the reorganisation of the management of State industry," summed up the conclusions drawn from the twelve years' experience of co-ordination and decentralisation. On the basis of this resolution a Decree was issued on February 13th, 1930, authorising the formation of Combines (see Appendix II) ; and detailed instructions have been issued by the Council of Labour and Defence and the Supreme Economic Council of the Soviet Union, in accordance with which the whole system of administration has been reorganised. The present system, from the Supreme Economic Council down to the particular enterprises, is described in the following chapter.

In addition to and generally controlled by the Supreme Economic Council of the Soviet Union, each of the Republics constituting the Soviet Union has its own Economic Council ; and under these again are the Regional Economic Councils, the Provincial Economic Councils, and the local Economic Departments.

The functions of these district and local Economic Councils is to see that the instructions of the higher Economic Councils are carried out in the industrial enterprises within their areas ; and there are also certain enterprises of purely local importance which come directly under their control. For the sake of clarity, the Trusts controlled directly by the Supreme Economic Council were the only ones to which reference was made in the earlier chapters ; but in addition to these, which comprised the most important enterprises regarded as "of All-Union importance," there are other Trusts combining smaller enterprises which are of importance only within one of the constituent Republics. These are "Trusts of

the Republics," and are controlled by the Economic Council of the Republic concerned. Further, there are also "Provincial Trusts," uniting factories which are only of importance within a single province ; these are controlled by the Provincial Economic Council. The local Economic Departments, again, control the smallest State factories which are not included in any Trusts. The 1930 re-organisation of industry was primarily concerned with the enterprises "of All-Union importance," and the Trusts of the Republics and of the Provincial Councils were for the most part left untouched, although there is a constant process of unification of the smaller Trusts and their inclusion as collective units in the organisations "of All-Union importance."

CHAPTER VII

NEW ORGANISATION OF STATE INDUSTRY

In the new system introduced in 1930 the types of organisation which have been described in the preceding chapters are still to be found—the Supreme Economic Council, the Syndicates (in their new form as “Com-bines”), the Trusts and the factories or other enterprises carrying out the actual work of production. But the Supreme Economic Council has been completely remodelled ; the renaming of the Syndicates marks a complete change in their status ; the Trusts continue to exist only in certain industries, and their functions are very much restricted ; and the individual enterprises are to a considerable extent sub-divided for administrative purposes into their constituent parts, with a very high degree of decentralisation in actual management.

At the head of the whole system of State industry is the Supreme Economic Council of the Soviet Union—a Department of State, whose president sits on the Council of People’s Commissaries of the Soviet Union. The principles on which its new structure is based are :

(1) It exists for the general control of State industry ; but it has no direct administrative functions or machinery. Its machinery is designed to guide the development and technical reconstruction of industry, to co-ordinate the work of the various branches of

industry, to issue general regulations with these objects in view and to see that they are observed by the subordinate economic units.

(2) The detailed work of its departments consists in : the preparation of plans for the reconstruction of each industry ; the examination and confirmation of plans of production and capital extension ; the appointment and dismissal of the managers of the Combines ; examination and confirmation of balance-sheets and reports ; the distribution of profits and losses ; authorisation of expenditure from capital funds ; audit of accounts and investigation of the Combines' work ; and the fixing of wholesale prices.

The Glavki, the Supreme Economic Council's departments for each industry, were entirely abolished, their place being taken by the Syndicates in their new description as Combines, whose functions are described later. The new structure of the Supreme Economic Council is threefold : (1) functional boards ; (2) sectional committees ; (3) the Combines.

The functional boards and industrial committees are part of the machinery of the Supreme Economic Council itself, and are maintained through the State Budget, as sections of a State Department. The Combines, on the contrary, are financially independent economic organisations, existing as separate legal entities on the basis of their Statutes (approved by the presidium of the Supreme Economic Council), but working within the limits fixed by the Supreme Economic Council.

The central apparatus of the Supreme Economic Council is now the Department of Technical and Economic Planning, set up in 1930 to unify the work of development and rationalisation of production. This work had

previously been carried out by separate sections for each industry, but it had become evident in practice that the technical improvement or development of any particular industry had an important bearing on other industries, especially those providing raw material or using the products of the developing industry as their raw material. The development of the chemical industry, for example, was essential to the development of the textile industry, agriculture, and other industries ; but it was conditioned by the development of the mining, coke and other industries ; and it was clear that the best results could only be secured by co-ordinating all development schemes so that all the industries affected moved forward simultaneously. Similar co-ordination is required in every large-scale plan of rationalisation, especially where the chief question is the concentration of production in particular areas.

The work of this new Department covers :

(a) Co-ordination of industrial plans ; drafting “perspective plans”—plans for many years ahead ; planning the required geographical distribution of industries ;

(b) investigation of questions of industrial policy and legislation ;

(c) examination and supervision of the work of the various Combines ;

(d) direction of the technical reconstruction of industry—drafting of general plans, development of new industrial products, introduction of specialisation, etc.

(e) general control of research and experimental work and actual management of certain scientific institutions ;

(f) development of the interchange of new methods and experience generally between the various industries and enterprises.

The sub-departments or sections deal with (1) co-ordination of economic plans among the various industries ; (2) costs of production ; (3) supply problems—questions of source of raw materials, reduction of transport costs, etc. ; (4) planning of capital construction and rationalisation of existing concerns ; (5) financial affairs—compiling the total budget of State industry, drafting schemes to make financial provision for industrial developments required and generally for the mobilisation of industry's financial resources ; (6) foreign trade—co-ordinating plans of import and export with the general internal production plans ; (7) accounting—supervising the accounting system throughout State industry.

In addition to the Department for Technical and Economic Planning, which carries out the most important functions of the Supreme Economic Council in giving general direction to State industry, there are five other important departments of the Supreme Economic Council carrying out specific work : (1) the Central Inspection Department, which carries out—largely through the similar departments in the Economic Councils of the various Republics—the auditing of accounts of State industrial units, and also controls the carrying out by these units of instructions issued by the Government or the Supreme Economic Council ; (2) the Prices Board, which investigates costs of production and fixes prices at which products are to be sold ; (3) (4) and (5) Research Boards, dealing with Industrial Methods and Technique, Geological Survey and Geodesic Investigation.

It will be noted that none of these departments have any special connection with particular industries : there can be no question of bureaucratic interference in the administration of industry, such as developed in the first period after the nationalisation of the factories. This

principle of "functional" as opposed to "industrial" departmentalisation within the Supreme Economic Council is the essence of the new system of organisation. But it was not possible to adopt it fully in 1930. In a system which aims at planned and co-ordinated production, departments on an industrial basis can only be done away with when independent organisation has developed within each industry. Until this organisation is developed, special departments of the Supreme Economic Council must continue to function for the precise purpose of organising the industry. There are four relatively important industries to which this still applied at the time when the new system was introduced in 1930—Clothing, Food, Printing, and Oils and Fats—and Committees for these industries are a part of the central machinery of the Supreme Economic Council. These industries, taken in the aggregate, are of considerable size, but most of the enterprises are small, and they are scattered throughout practically the whole territory of the Soviet Union. It has therefore not been possible to unite the enterprises in any form of Combine. The Committees of the Supreme Economic Council have no direct control over the enterprises in these industries, but only exercise a general supervision and plan the general re-organisation and concentration of enterprises, with a view to the gradual formation of an independent and comprehensive Combine. The Committees also prepare estimates and plans of production and supply, and draft general regulations and instructions covering the industries.

There are also two other Committees with specialised industrial functions—the Central Cotton Board, whose chief function is the encouragement of cotton-growing; and the New Rubber Committee, formed to develop the commercial exploitation of a form of rubber obtained

from plants in Central Asia. It is probable that the Central Cotton Board will be merged in the Textile Combine, and that the work of the New Rubber Committee, if it succeeds in developing the new product, will be handed over to the Rubber Combine. The Central Cotton Board is a survival, which has been kept alive for special reasons, and the New Rubber Committee is an emergency organisation to explore and develop a new industrial possibility, which may effect enormous economies in Russia's imports from abroad. Neither these nor the Industrial Committees previously mentioned can be regarded as permanent parts of the Supreme Economic Council's machinery.

The Combines—the Syndicates in another form—are now the equivalent of the former Chief Committees for each industry. When the New Economic Policy was first introduced in 1921, and for many years after that, it was regarded as a vital principle in the Soviet industrial system that the functions of control and planning should not be exercised by any organisation which was also carrying out administrative work. This was the principle on which the Trusts were formed—to relieve the Supreme Economic Council of all administrative functions, leaving the Glavki only general functions of control and planning. The development of the Syndicates had, however, driven a coach and pair through this principle, for the essence of their work in its later stages was that they were continuously planning and controlling the work of the Trusts subordinated to them, on the basis of the information they gained through their operative functions in selling the products of the Trusts and buying the raw materials and supplies which they required. They were carrying out the planning functions of the Chief Committees for each industry, and the latter had no alternative but to sit

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and watch them doing it, just because the Syndicates were combining control and planning with practical work and using control and planning as a direct aid to the development of their practical work.

On the other hand, the conditions which had led to the adoption of the principle of divorcing control from administration no longer existed. When the New Economic Policy was introduced in 1921, it was felt to be necessary to put industrial concerns on an independent financial footing, and on the other hand to preserve some central machinery to prevent these independent concerns from placing their own financial interests in opposition to the general economic interests of State industry. But by 1930 the whole system of State industry was working smoothly within a single economic plan, and the possibility of the separate units opposing the central plan was no longer real. Therefore all doubts about the wisdom of combining controlling and operative functions were easily dispelled, and the Syndicates were simply transformed into official organisations of a new type—financially independent and autonomous in their operations, while at the same time the sole controlling and planning sections of the Supreme Economic Council so far as their particular branch of industry is concerned.

In their new position as sections of the Supreme Economic Council the Syndicates became all-embracing industrial Combines, with the following main functions :

- (a) to plan production in their particular branch of industry ;
- (b) to plan and supervise capital construction ;
- (c) to control the technical work of the industry ;
- (d) to organise the sale of products and purchase of raw materials and supplies ;

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- (e) to control the commercial and financial activity of the subordinate enterprises ;
- (f) to deal with labour questions ;
- (g) to organise the training and allocation of technicians for the industry ;
- (h) to appoint and dismiss the managing personnel in the subordinate enterprises.

The Combines are of three main types :

- (1) Concerns covering enterprises and Trusts of importance to the whole Soviet Union.
- (2) Concerns covering enterprises and Trusts, some of which are of importance to the whole Soviet Union, and some of which are only of importance within one or other of the individual Republics.
- (3) Concerns of the Syndicate type (i.e. buying and selling organisations), covering enterprises and Trusts which are only of importance locally or within the individual Republics.

They are all equally independent financial units, dependent for their finance on the enterprises and Trusts which they control ; the division into three types refers to the particular authorities with which they are connected and the particular work which they have to carry out. The functions of the first group, for example—the concerns covering enterprises and Trusts of importance to the Soviet Union as a whole—are :

- (1) to plan the productive work of the enterprises under their control ;
- (2) to plan and supervise development work—extension or organisation of factories and equipment.

(3) to carry out technical control of the enterprises—i.e. to supervise their activities, receive and examine reports, appoint and dismiss the managing personnel, secure and distribute qualified personnel, organise the sale of products and purchases of material and supplies required, and control all financial arrangements.

In a word, the combinations of this type function in much the same way as the central offices of the great combines in other countries—they plan and supervise the activities and development of the various enterprises under their control, centralising to a greater or less degree the sale of products and purchase of materials, and financial operations, but acting, in the administration of productive enterprises, through managers appointed by and subordinate to the managing director of the Combine. Just as the enterprises owned by a Western Combine may be organised either as separate units or in groups (subsidiary companies), so in Soviet industry the enterprises controlled by the central Board of a Combine may be organised in groups forming “Trusts” or may be separate units coming directly in touch with the central Board.

The formal organisational structure is therefore much the same in highly developed Western industry and in Soviet industry ; but the Soviet Combines are far more comprehensive than the Western Combines, and the type of organisation is more uniform ; there is also the fundamental difference that the Soviet Combines are subordinate to the Supreme Economic Council and work in accordance with a general economic plan for the whole of the Soviet Union.

In 1930, Combines of the first type—controlling enterprises and Trusts of importance to the Soviet Union as a whole—existed for the following industries :

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1. Coal
2. Automobile and Tractor Construction
3. Electrical Engineering
4. Marine Shipbuilding
5. River Shipbuilding
6. Steel
7. Electricity Supply
8. Sugar
9. Oil
10. Rubber
11. Non-Ferrous Metals
12. Artificial Fibres
13. Munitions
14. Aircraft Construction
15. Cinematograph Films
16. Boilers and Tubes
17. Textile Machinery

The second type of Combine is almost the same as the first type, except that concerns of the second type control not only Trusts and enterprises of importance to the whole Union, but also Trusts and enterprises which operate only within one or other of the separate Republics in the Soviet Union. In the case of such enterprises—operating only within a single Republic—the Combine functions under the supervision of the Economic Council of the particular Republic. For example, the Textile Combine embraces many large Trusts producing for the whole Soviet Union, but also many smaller enterprises producing only for their immediate area. The latter come under the general control of the Economic Councils of the particular Republic in which they are situated, while the former come under the Supreme Economic Council of the Soviet Union. The Textile Combine is responsible for the larger enterprises

to the Supreme Economic Council of the Soviet Union, and, for the smaller enterprises, to the Economic Council of the particular Republic. The functional difference is that, in the case of the smaller enterprises, the Textile Combine functions as a Syndicate, selling their products and purchasing the raw materials they require ; it does not appoint the management, which is appointed by the Supreme Economic Council of the particular Republic.

But the Textile Combine takes the production of these smaller enterprises into account in its general plan of production, and plans their extension or re-equipment ; and it is also responsible for securing the skilled technicians whom they need. Combines of the second type, therefore, such as the Textile Combine, carry out all planning and administrative functions in connection with the large enterprises which they directly control ; but in addition they carry out buying and selling and general co-ordinating functions in relation to smaller enterprises. The existing organisations of the second type in 1930 were in the following industries :

1. Agricultural Machinery
2. Building
3. General Engineering
4. Non-metalliferous Mining
5. Chemicals
6. Peat
7. Textiles

The third type of Combine comprises enterprises and Trusts which operate only within a particular Republic or other limited area : the functions of these Combines are similar to those of Combines of the second type in relation to the smaller enterprises they cover, namely,

general planning and co-ordination, and the sale of products and purchase of materials, but not the appointment of managers. Combines of the third type exist in the following industries :

1. Salt
2. Matches
3. Timber
4. Glass
5. Paper
6. Leather

It must be understood that Combines of all three types function equally as sections of the Supreme Economic Council of the Soviet Union in their planning and general co-ordination work ; the differences between the types depend on the existing differences in the subordination of particular enterprises to the Supreme Economic Council of the Soviet Union or to the Supreme Economic Councils of the separate Republics.

The Combines are independent financial units, not supported by the State Budget, but, in the case of Combines of the first type, making up their balance-sheet by combining the balance-sheets of the enterprises and Trusts within their particular industry. The Combines covering only enterprises and Trusts of All-Union importance merge their finances with the finances of their subordinate productive units, making one great industrial unit which is a single financial unit. The profit of these Combines is the aggregate difference between the cost of production and wholesale distribution and the selling prices of the goods produced—the selling prices being fixed by the Supreme Economic Council.

In the case of the Combines of the second type, embracing both trusts and enterprises of All-Union importance and Trusts controlled by the Economic Councils of

the separate Republics, the profit is arrived at in the same way, but a part of it is handed over to the Trusts of the separate Republics, in proportion to the total value of their products handled by the Combine.

Combines of the third type, functioning purely as Syndicates so far as the enterprises they cover are concerned, make their profit on a commission basis or on the difference between the agreed prices at which the goods are handed over to them for sale and the actual selling prices.

In all cases the Combines are under the control of a single Director, appointed jointly by the Supreme Economic Council and the trade union concerned in the industry. He selects his chief assistants, subject to confirmation by the Supreme Economic Council and the trade union ; and he appoints in turn the single managers of the Trusts or enterprises subordinate to the Combine—again subject to the same confirmation. The head offices of all the Combines are in Moscow ; but the supply departments, whose function it is to provide the Trusts and enterprises with the raw materials and supplies they require, are based on the most important Trusts. The Combines may secure the raw materials and supplies required by the enterprises either by undertaking the production of these requirements, or by entering into agreements with other Combines which produce what is needed or with Co-operative organisations which collect the materials required from the peasant producers.

The general structure and functions of the Combines are those of the Syndicates, described in Chapter IV. The functions of sale have been immensely simplified by the system of " provisional orders " aggregated by other Combines, or by the Centrosoyus from the Co-operative network, and handed on to the Combine. The functions of

supply have also been simplified by the formation of other Combines and the strengthening of the Co-operative machinery for collecting raw material from the peasants. The Combines therefore are now concerned with the organisation of sales and supplies rather than with detailed transactions with the consumers or suppliers.

This enables the Combines to pay more attention to the organisation of production and reconstruction of the industry—their special function as sections of the Supreme Economic Council. In order to ensure that real attention is given to this side of their work, each Combine is obliged to form a special section of highly qualified specialists who are not involved in current administrative work, but whose duty is to work out the general principles for the reconstruction and technical improvement of the industry, and to organise the exchange of experience and technical discoveries between the various enterprises covered by the Combine. A further step in this direction is the handing over to the Combines of the scientific institutions working on their particular branch of industry, so that scientific discoveries can be immediately tried out in the factories, and discoveries or inventions in the factories can be immediately subjected to scientific investigation.

The Combines, in short, are entrusted with every aspect of the development of their particular industry. They are divorced from the actual management of particular Trusts and enterprises—for these are all autonomous as far as their current work is concerned—but they are intimately in touch with the needs of the industry and of the consumers of the industry's products, through their selling and buying operations. They are constantly concerned with the development of their particular industry, to keep pace with the steadily increasing demands of the country as a whole ; and through their planning and technical

departments they are in constant touch with the possibilities of the enterprises under their control. Through the fact that they are, jointly with their subordinate enterprises, independent financial units, they have the greatest incentive to lower the costs of production—for they cannot raise prices, the level of which is fixed by the Prices Department of the Supreme Economic Council. The Combines are therefore the most efficient form of centralised control which has yet been devised in Soviet industry.

In the new scheme of organisation, the tendency is to drop the Trusts and to establish direct relations between the Combine and the individual enterprises. This is especially the case in industries which are geographically compact, so that the factories within each area can be worked as a single enterprise carrying out specialised work at the various factories. But in industries in which the factories are scattered, the Trust is still a useful form of organisation intermediate between the Combine and the particular factories. The new scheme therefore makes provision for Trusts, but their functions are completely different from those of the original Trusts. They are no longer organisations for the management of a group of enterprises ; their work is now concentrated on the technical improvement and reconstruction of the enterprises under their control. They are specially instructed to :

(a) organise the exchange of technical experience between the factories ;

(b) ensure the utilisation of inventions and technical discoveries ;

(c) ensure the mobilisation of the internal resources of the enterprises (i.e., see that supplies and raw materials are not accumulated in greater quantities than required) ;

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- (d) organise proper accounting and costing within the enterprises ;
- (e) enforce the standards of quality and classification laid down ;
- (f) form special committees for rationalisation.

The Trust's technical control over the enterprises it covers is now based primarily on functional lines ; as in the case of the Syndicates, the Trusts were told to form special committees of qualified technicians, freed from current administrative work, to supervise the work of the subordinate enterprises. The Trusts were also instructed to set up special commissions, composed of experienced workers and " young engineers," to investigate special questions and bring experience from one factory to another.

It is obvious from the above that the new Trusts are merely outposts of the Combine in their industry, carrying out, in relation to a particular group of enterprises, the work of technical supervision which was in general entrusted to the Combines. The centre of gravity in the actual administration of productive units has shifted to the units themselves.

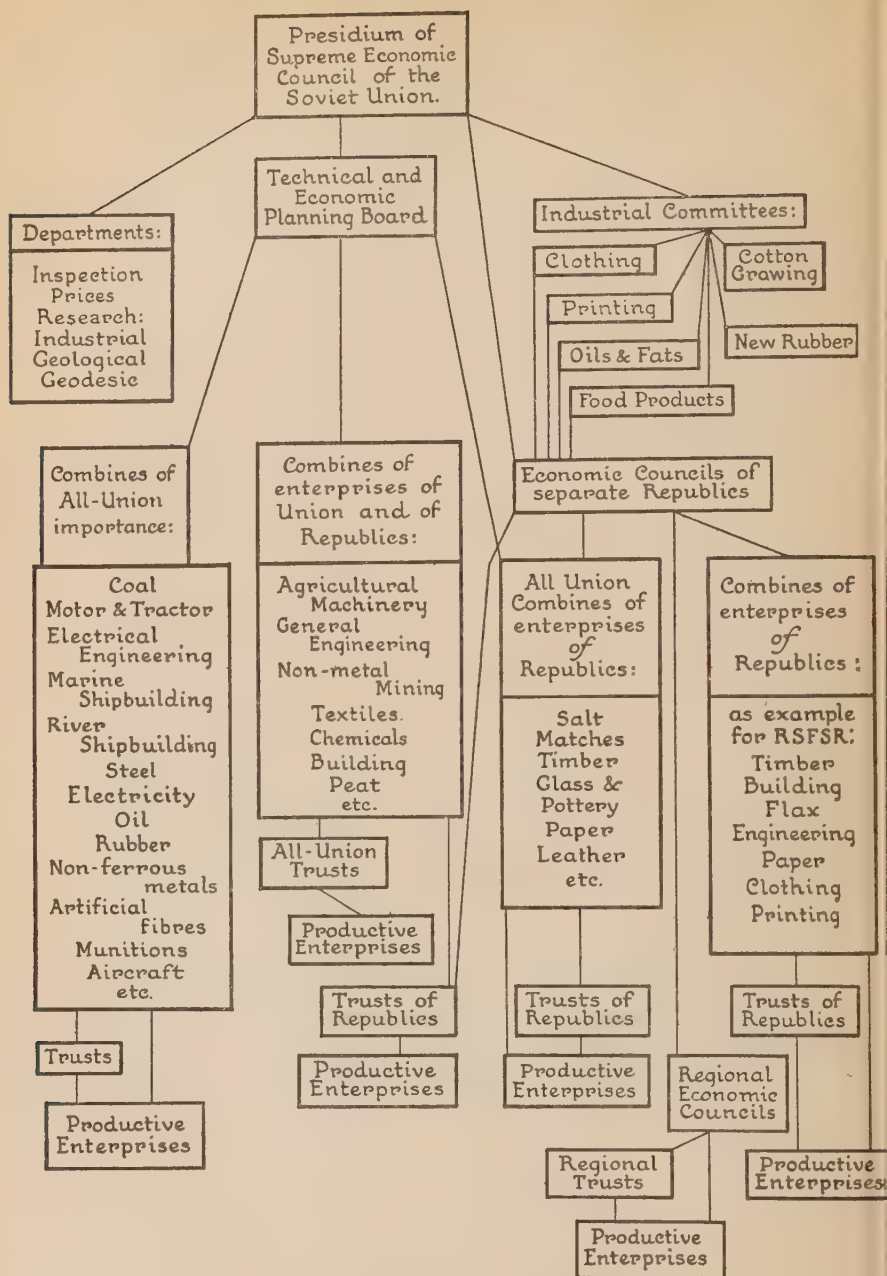
The Communist Party's resolution of December 5th, 1929, on which the new system of organisation is based, opens with the declaration that the productive enterprise is the basic unit in the organisation of industry. " The placing of each enterprise on an independent financial basis makes it easier to form a correct idea of the enterprise's productive work and to keep the workers informed of the results of this work." For that reason it was necessary to extend the practice, already in force in some industries, of putting each enterprise on an independent financial footing. Under this system each enterprise makes up its own balance-sheet monthly, showing the cost of production

for each type of product. The difference between this and the cost of production provided for by the Supreme Economic Council shows the efficiency of the management. A part of this difference is left with the enterprise, to meet the needs of expansion or re-equipment.

But the resolution laid down that it is not enough to have the aggregate results of an enterprise as a single unit. In order that both the manager and the technical staff may have the necessary detailed information on costs, each workshop or department of an enterprise must be put on a separate accounting basis. The new system means that every workshop and productive department of an enterprise keeps a record of its costs (including an allowance for depreciation and overhead expenses), and this is compared with the agreed price of the products. Thus every departmental manager is kept on the alert, and the manager of the whole enterprise is automatically informed of how efficiently each section is working.

The system of separate accounting for the enterprise as a whole and for the separate departments is of considerable help not only to the manager and the technical supervisors of the higher industrial units, but also to the production conferences of workers. "Socialist competition"—the matching of shop against shop in production results—is an important factor both in the actual amount of effort expended by the workers and in the encouragement of inventions and of suggestions for improved methods. All the results, of the factory as a whole and of the separate shops, are reported to the production conferences of workers, which discuss them and make suggestions for further improvement. The new system has given a general stimulus to the workers' interest in the production conferences and in the trade unions' economic activities generally.

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The internal organisation of the smaller enterprises remains as described in Chapter V. But in the case of the larger enterprises there is necessarily a certain hierarchy. In all cases, however, a single manager is in charge of the whole unit, and his assistants are in charge of functional sections rather than parts of the enterprise. The idea behind the whole system is to put full responsibility in the hands of one man, and to have him assisted by specialists looking after special classes of work.

The whole of the new system, from top to bottom, is based on co-ordinated planning and decentralised work, but it has brought the two closer together, with the natural result that both have become more effective. There is no longer the sharp antagonism between control and operative work, because operative work itself has had a new objective put before it—not profits, but technical improvement and increasing output, of which the accounting profits are the sign and not the purpose. The new organisation of State industry under the Supreme Economic Council is represented in diagram form on page 144 ; and its detailed application in the oil industry is described in the following chapter. The field covered by other important Combines is shown in Appendix III ; the internal organisation and the functions of these Combines are closely parallel to those of the Oil Combine, which has been selected for detailed treatment because, in addition to its work within the Soviet Union, it carries out extensive foreign trade operations which are an essential part of the general economic plan.

CHAPTER VIII

ORGANISATION OF THE OIL INDUSTRY

There are two important oil-bearing regions in the Soviet Union—Baku, the largest, with a present annual output of close on ten million tons, and Grozny, with an annual output of five million tons. In addition, oil in much smaller quantities is raised in a number of other areas—Emba, the Urals, Sakhalien, etc. Until the 1930 reorganisation of industry the oil industry in each of these regions was worked by a separate Trust, under a Board of Directors appointed by the Supreme Economic Council ; and there was a joint organisation for the sale of oil products on behalf of the producing Trusts—the Oil Syndicate, the Directors of which were elected by the Oil Trusts, subject to confirmation by the Supreme Economic Council.

The Oil Syndicate had its own sales apparatus in every part of the Soviet Union, and had set up special companies, such as Russian Oil Products Limited in London, for the sale of oil products in other countries. In 1930 the organisation was considerably altered. The Oil Syndicate and the Trusts were merged, and the combined organisation was renamed “Soyusneft”—the Oil Combine of the Soviet Union. Following on the disappearance of the Trusts, each oil area was organised as a single productive enterprise, subject to the general control of the Oil Combine, but autonomous in its current work.

Each of these organisational units is under the control

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of a single individual, the Chief or Managing Director. The Chief of the Oil Combine is appointed by the Supreme Economic Council (subject to the approval of the Miners' Union, which organises the workers in both the coal and oil industries) ; he selects his colleagues and appoints them to take charge of departments, subject to approval by the Supreme Economic Council. The Chief of the Oil Combine also appoints the managers for each oil region, and the Directors of subsidiary companies. In the case of all the leading officials the appointment is subject to the approval of the Supreme Economic Council and the trade union.

The head office of the Oil Combine is in Moscow : it is essentially a central co-ordinating organisation, to control the production and wholesale distribution of oil products. In attempting to describe the continuous work of a vast organisation of this kind it is difficult to find a starting-point : but the logical starting-point of its work from year to year is the plan of production and distribution put forward by the State Economic Planning Commission (Gosplan) and adopted by the Soviet Government. At the present time, the oil industry and all other industries are working on an annual programme which is part of the general Five Year Plan, according to which the oil production of the Soviet Union in the economic year ending September 30th, 1933, should be more than trebled—forty million tons in 1933 as compared with twelve million tons in 1928.

This increase in production requires continuous development work, in the opening up of new wells and new areas ; the extension of existing refineries and the opening of new refineries ; the installation of cracking plants, etc. ; and the construction of new pipe-lines. The Oil Combine has therefore not only to organise the efficient working of

present plant, but to work out in detail how, when, and by what means the extensions are to be carried out year by year.

The total plan of production for each year indicates the areas from which the oil is to come. The Oil Combine has, therefore, to instruct the managers of the various fields accordingly, with details of the refined products required and the quantities for sale within the Soviet Union and the quantities for export. In the meanwhile the Combine has to make contracts for the sale of this oil. Inasmuch as the production plan is drawn up on the basis of the annual quantity of oil required within the Soviet Union, the chief customers of the Oil Combine are the other Combines which use oil in the industries they control. Every year there is a surplus for export, which is handled on a commission basis by R.O.P. in Britain and similar companies in other countries. The price within the Soviet Union is fixed by the Prices Department of the Supreme Economic Council, with the costs of production during the preceding year as the basis for a calculation which also takes into account overhead charges, depreciation, and changes in cost proposed by the general plan—that is, changes in costs of supplies, and proposed reductions in costs of production owing to rationalisation and more efficient working generally. The profit of the Oil Combine is the difference between the cost of production fixed in the plan and the actual cost of production ; and, in addition, the profit made on selling operations abroad.

Of the total profit, a part (10 per cent.) is set aside to improve the conditions of the workers—building of new houses, clubs, sports grounds, etc.—and another part (about 40 per cent.) is divided among reserve funds, which are actually kept to develop the industry. The development of the industry falls into three main categories—

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the sinking of new wells, the extension of refineries, and the construction of new pipe-lines. In view of the relatively backward position of the Soviet metal and engineering industry, a large part of the machinery and equipment required has to be imported from abroad. The proceeds from the sale of oil outside the Soviet Union are therefore partly used to buy machinery and equipment abroad ; these purchases are made under the general control of the Trade Delegations of the U.S.S.R. in the countries concerned. In practice, this means that the contracts have to be reported to the Trade Delegation, and licenses to import into Russia the machinery or equipment bought are issued by the Trade Delegation, which sees that the quantities and values are within the limits fixed by the general plan of imports.

It must be understood that the general plan for the oil industry covers not only the quantity of oil to be produced and refined, but also the equipment and materials and supplies required for that volume of production, and the plan is expressed in two forms—quantities, and in terms of money. The item of labour costs is expressed, so far as each industry is concerned, only in terms of money : the actual food, clothing and other requirements, for which this money is exchanged, enter into general plans for food and other supplies, which lie outside the scope of each particular industry. In terms of money, therefore, the plan for each industry is a budget of receipts from the sale of products, against which is set the costs of all kinds involved in production. In every industry these costs include charges for depreciation as well as for materials and wages ; and the surplus of receipts over costs is the estimated profit. It is from this surplus or profit that amounts are set aside as reserves, the main function of which is the purchase of machinery and equipment to

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extend the productive resources of the industry, and also to provide for the labour and other costs involved in that extension. The balance of the surplus or profit from each industry goes to the State Budget, entering into the item of "receipts from State industry"; certain items of taxation payable by the industrial concerns enter into the budget for the industry as a production cost, and into the State Budget as a receipt from taxation. The elements of the financial plan for each industry are therefore on the following general lines :

<i>Income</i>	<i>Expenditure</i>
Receipts from the sale of products	Cost of raw materials and supplies used in production and maintenance
Receipts from any other source	Cost of labour (wages and salaries) Overhead costs—office expenses, interest, commission, taxation, etc.
	Surplus { Reserves { State Budget

Development Plan

Reserves for extension	Cost of machinery and equipment, buildings, etc.
Loans " "	Cost of labour on development work Overhead costs on development work

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In the case of the oil industry, receipts from the sale of oil abroad form a very substantial part of the total receipts, and there is a substantial annual surplus, with correspondingly substantial reserves for extension. As a large part of the machinery and equipment required for extension has to be imported from abroad, part of the proceeds of the sale of oil abroad is utilised for this purpose. In estimating the amount which will be obtained for oil sold abroad year by year, to some extent prices are already fixed under contracts, and for the balance an estimate is made on the basis of market conditions. In the case of the oil sold within the Soviet Union, the estimates both for quantity and price are much more definite. It is not merely a question of forming a general estimate on the basis of the quantities sold and the price obtained during the previous year. The important consumers of oil are themselves State industries, organised in Combines, or special organisations of a Combine type. Railways, shipping, road transport, aviation and all industries using oil (lubricating and fuel) are themselves working on a production plan which covers the supplies required as well as the output or volume of work to be done. The oil required by each of these industries for the coming year is therefore practically a fixed quantity, on the basis of which a general contract can be made between the Combine for each industry and the Oil Combine. In addition to these customers, the Oil Combine sells oil to *Centrosoyus*, the central Co-operative organisation, for distribution among the whole network of Co-operative Societies and Unions of Societies. In this case also there is an estimate of the needs for the year, built up on the requirements for each area. In addition, there is also the quantity of oil which will be used up in the process of production and refining. Thus the amount of oil (and the

different kinds) which will be required each year for the internal needs of the Soviet Union is known with a very high degree of accuracy, owing to the unification of the plans for all industries ; and the actual wholesale buyers of oil are known, while the internal wholesale price is fixed, on the basis already described, by the Prices Department of the Supreme Economic Council.

The determination of the quantity required for export is necessarily carried out on a different basis. To some extent contracts have been made with foreign buyers ; but beyond these contracts the possibilities of sale depend on the condition of the market in other countries and on the general factor of competition. Here again, however, the system of planning operates, though from an angle different from that operating in internal sales. In the first place, there is the question of machinery and equipment required to be imported from abroad for the maintenance and extension of the oil industry. As this has to be paid for in foreign currency, the plan provides in the first place for the sale of oil abroad to cover the cost of these goods. Secondly, there is the question of other goods required to be obtained from abroad, to fill in gaps which cannot be filled by industry or agriculture in the Soviet Union—certain machinery and equipment for other industries, rubber, tea and other commodities which the Soviet Union has to import. In order to maintain the balance of exchange with foreign countries provision has to be made in the plans of those Soviet industries which can find markets abroad—oil, timber, flax, etc.—for the production, export and sale abroad of sufficient quantities of products to produce the total value required abroad. The distribution of these quantities among the different Soviet exporting industries is based partly on anticipated conditions on the foreign markets and partly on the productive

possibility in each exporting industry in the Soviet Union.

Obviously the export plans are subject to modification in the light of actual conditions during the year. Either the failure of a particular exporting industry to produce the estimated quantity required, or the failure of the foreign markets to absorb the quantity available for export, may reduce the export totals anticipated. Similarly, the granting of credit by foreign banks or manufacturers may make it possible to buy more from abroad than had been anticipated. In general, the imports and exports section is the least accurate part of the plan for each industry, but especially in the oil and timber industries the experience of recent years shows that no very substantial modifications are found necessary.

The Oil Combine therefore has a definite annual programme of production to work on, based on actual known requirements within the Soviet Union, with an addition for exports, a part of which is already fixed by contracts with foreign buyers, while the rest is to some degree dependent on market conditions. The Combine then has to organise the production of the total quantity required—including development work, which is of special importance during the present period of rapid extension. There is first the distribution of production among the different oilfields—a matter already to some extent provided for in the plan. When this is settled, the necessary instructions are sent to the managers of the oilfields, who in turn have to parcel out the allotted total among the various sections of the oilfields, and the sectional managers have to parcel out their allocations among the existing wells or new wells which are to be brought into exploitation. Thus each productive unit has a definite task assigned to it for the year ; and the same holds good for the refineries.

The second question that the Oil Combine has to consider is the supply to the productive units of the items needed in the process of production and refining, including both new equipment required and money for wages and other current needs. The money requirements are arranged for in the general plan, and the question of providing each oilfield with the money it requires from week to week is relatively simple, though of course this question has to be considered in fixing the payment terms under contracts both of buying and selling. With regard to the supplies required by the different oilfields in kind, the quantities are indicated in the general plan ; and just as the Combines in other industries make contracts with the Oil Combine to purchase the oil needed by them, so the Oil Combine makes contracts with the other Combines to supply the items required for the oil industry.

This also covers the question of equipment and supplies needed by the oil industry for extension. In so far as these requirements can be met by Soviet industry, they are provided for through contracts with other Combines ; but in so far as they have to be obtained from abroad, the Oil Combine has to make contracts with foreign firms to supply them. As already indicated above, the orders as a rule are actually placed through special subsidiaries of the Oil Combine, such as R.O.P. in London, and the financing of these orders is arranged by using the proceeds of oil sold abroad.

The method by which the sales of oil are arranged has already been explained. The Oil Combine, having completed its general contracts for the sale of oil products and the purchase of equipment and supplies needed by the industry, is then faced with the detailed operations involved. The contract with the Railways Administration, for example, is made between the head offices of the two

organisations concerned, but of course the oil itself passes from a particular oilfield or tank storage station to a particular section of the railway system. Orders for actual requirements are sent by the sectional offices of the railways to the Central Railways Administration, and are passed on by it to the Oil Combine. The Oil Combine then has to instruct its producing units, or storage stations, to make the delivery in accordance with the terms of the contract. This is not an absolutely simple routine passing on of orders, in which the head office of the Oil Combine is merely a circumlocution office. On the contrary, the allocation of orders has to be made, not only in accordance with the general plan, but also taking into account the actual oil available at each point. Supplies at a particular station may be low, because of an unforeseen demand, or a temporary breakdown in communications, or a slowing down in the output of oil-wells from which the station is normally supplied. All of these factors have to be known and taken into account by the head office of the Combine, so that it may send the orders to the points from which they can best be met and organise the transport of oil from the wells and refineries to the storage stations.

In the same way, the records and accounting involved in all these detailed transactions are centralised in the head office of the Oil Combine, and the accounts are sent to and settled by the head office of the Railway Administration or other organisation to which the oil is supplied. All finance is centralised and allocated by the Oil Combine in accordance with the needs of each section of the industry.

But the work of the Oil Combine is not limited to the organisation of current operations. The starting-point taken in describing its work was the presentation to it of a plan of operations adopted by the Government. The plan

of operations itself, however, is not something which descends from on high as an arbitrary ruling on what the industry must produce, without reference to the industry itself. The plan for each industry is built up on draft plans prepared by the industry itself ; the work of the Planning Board of the Supreme Economic Council, and of the State Economic Planning Commission, is to co-ordinate the plans of the different industries with each other and with the still wider plans covering the whole economic and social life of the Soviet Union. But the basis for the co-ordinated plan is the series of plans prepared by each industry. The Combine is responsible for the preparation of the plan, receiving from each oilfield and department the details on which the general plan for the industry is based.

The plan for each industry is not only in terms of goods and money. The necessary supply of labour has to be estimated, and such requirements as housing for the workers must be taken into account, especially when new oilfields are being developed. Account must also be taken of the technical staff required ; and it is one of the duties of the Oil Combine not only to allocate the technically trained staff among the different oilfields, but also to organise the training of an adequate number of technicians. The Combine must also see that all technical questions are continuously under investigation and that the results of all scientific enquiries, as well as useful inventions or discoveries made by any of the employees, are given proper consideration and adopted if they are of practical advantage. With these objects in view, the Oil Combine has set up a special committee of highly qualified experts, not concerned with current administrative questions, to watch the technical side of the work throughout the industry, to consider the practical results and

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recommend measures for continuous improvement in methods and organisation of work, including general plans for reorganisation of the industry, the development of new areas, construction of pipe-lines, etc. And in order to bring theory and practice closer together, the Oil Combine has been entrusted with full responsibility—financial and organisational—for the scientific institutes where questions of prime interest to the industry are being investigated and where technicians are being trained.

Thus the central organisation of the Oil Combine is in reality the co-ordinating point in the current work and finance of the industry, and it is also the point for co-ordinating all the initiative and scientific knowledge through which the future reconstruction and development of the industry can be planned and carried through. Because of this, it is necessarily a vast organisation, with over five thousand employees engaged on the centralising work, apart from controlling indirectly some two hundred thousand workers and employees engaged on the operative work of production and distribution. But it is not a bureaucratic organisation. It is not supported by the State Budget, but by the industry. It is not divorced from production and distribution and finance, but is actively engaged in co-ordinating these throughout the industry. It is in direct touch with the managers of the oilfields and of the subsidiary organisations. In other words, it is a business unit, functioning in its daily work on much the same general lines as the central offices of the Western Oil Combines, but with the essential difference that its work is part of an organised whole, part of a general scheme covering the economic and social life of the country.

In accordance with its functions, the internal organisation of the Oil Combine is built up on separate departments dealing with production, distribution (sales),

finance, planning, and technical research and training, with a central secretariat. Each of these departments is under a manager, and the ultimate control is in the hands of the Chief or Managing Director appointed by the Supreme Economic Council. For definite sections of its work, as already indicated, special financially distinct companies have been set up, operating both in Russia and abroad. These subsidiaries function as departments of the Combine, and are directly responsible to the Chief of the Combine.

It will be observed that the principle underlying the separation into departments is functional as distinct from regional. Each department is concerned with its particular aspect of work in every oilfield, and is not jealously guarding the interests of any particular oilfield ; the result is a far better unification, and far smoother working than under the previous system, when the Trusts (on a regional basis) were fighting for their own separate interests.

There is no intermediate link between the departments of the head office and the oilfields. A single manager is in charge of each of the oilfields ; he is appointed by the Chief of the Combine. He is the ultimate authority on all detailed questions connected with the work of the oilfield, although the actual programme of work comes to him through the appropriate department at the head office of the Combine. The manager of the oilfield is assisted by sub-managers in charge of " functional " departments—in the large fields, Baku and Grozny, these are on the same lines as the departments at the head office of the Combine. Then there are the managers of groups of wells, of the refineries, of the pumping-stations and pipe-lines of each distinct unit in the oilfield. The departments in the head office of the oilfield are in touch with the managers

of the separate units, and give a general direction and control to their work on the basis of the plan for the oilfield and the detailed deliveries ordered by the head office of the Combine. But each unit, including the oilfield as a whole, is working on an autonomous basis so far as the current work is concerned. The manager of the oilfield cannot give orders to a foreman or worker in a refinery or other unit : the manager of that unit is the only authority—although his own appointment and dismissal are in the hands of the manager of the oilfield. With this autonomy goes also financial independence. The manager of each unit has a definite cost of production to which he must work. This cost of production is related to the wholesale price fixed by the Supreme Economic Council, and is based on the actual costs of production for the preceding period, with any modifications made necessary by changed conditions. Each productive unit has therefore to produce (or refine, or pump) in the year a certain quantity of oil, at a certain cost. The job of the manager is not to decide how much to produce—that, and its distribution, are laid down for him—but to organise the production of that quantity in such a way that the cost is below the cost allowed in the plan, which is also the price with which his unit is credited for “ sales ” to the next unit or Combine. If by better methods and organisation he can effect a saving on the estimated cost, that unit has made a “ profit ”—for it is credited with the *estimated* cost for all “ sales,” and is debited with supplies and money used, representing the *actual* cost of production. The purpose of this separate accounting for each unit is both to test its efficiency—to have a definite criterion by which results can be measured—and to encourage the manager and all workers in each particular unit to take an interest in its efficiency. The functional departments in the central

office of the oilfield—in particular the technical department—are constantly striving to help each unit towards greater efficiency, by advising it on organisation and technique, helping it to develop a detailed costing system, circulating the results of research and experience, and so on.

In the whole of the foregoing, reference has been made only to the management. But while the managers of each unit are finally responsible, and their decisions on current administrative questions are final, a considerable share in the organisation of the work is undertaken by the workers. In each productive unit there is a factory committee, the general constitution of which is described in Chapter V. This factory committee is the basic unit of the Miners' Union, which organises both coal and oil workers. Its main current work is the protection of the worker's interests—on questions of pay, holidays, etc., on the basis of existing labour legislation and the general agreement between the Miners' Union and the Oil Combine. But through the Miners' Union it can secure the removal of a manager, and it is a definite part of its work to examine the work of the productive unit from the standpoint of economic management and efficient technique, especially through the production conferences. These are mass meetings of the workers in each unit, at which the manager of the unit makes a report on the results obtained, the factory committee makes its comments on the report, and the workers' criticisms and suggestions are invited. Thus, on the one hand, the management and the technical staff, and, on the other hand, the workers of all grades actually engaged in production are engaged in reviewing the results obtained, considering improved methods and technique, and pooling initiative and experience.

Through these conferences, too, the spur of "socialist competition" is introduced. Comparisons are made between the results obtained in different units, and one unit challenges another to a competition to secure certain results in a given period. These competitions not only spur the workers to greater collective efforts, but also act as a spur to the adoption of improved methods and technique, the suggestions coming from the workers themselves.

Thus in every part of the oil industry the process of improving organisation and technique is helped forward. The research workers in the technical institutes, the special organisation committee and technical department of the Combine, the similar departments of the different oilfields, the managers, technicians and workers in every productive unit are all drawn into this work. In the same way, the central aim of the co-ordination work of the Combine, both in production and distribution, is to secure more economical and efficient results. Above the oil industry as a separate unit there is also the Planning and Technical Board of the Supreme Economic Council, working with the same aim on questions covering all industries, including the oil industry. Above the Supreme Economic Council, again, there is the State Economic Planning Commission, working with the same aim on a more abstract but no less essential idea—the improvement of organisation and technique in the whole economic and social life of the country. The oil industry is a most vital part in this, and the principle of independent management of each section of the industry does not in any way interfere with the principle of work and development according to a definite and co-ordinated plan.

CHAPTER IX

TRANSPORT

THE Soviet Union Commissariat for Transport (Ways and Communications) controls all branches of transport other than purely local transport, such as tramways in the towns, which are controlled by the local Soviets. There are five main departments—railways, sea transport, river transport, road transport, and “freight”—the last named for chartering and agency operations. Each of these departments is a Combine of the same type as the Combines under the Supreme Economic Council—they unite the whole branch of transport with which they are concerned, and work on an independent financial basis. They are not bureaucratic but business organisations ; and, on the other hand, the managing director of each department is a member of the Board of the Transport Commissariat.

The new administrative organisation for the railways, adopted on May 5th, 1930, is based on the same principle as that in force in the industries under the Supreme Economic Council—a central organisation, built up on “functional” departments, and a number of separate sections of the railway system, each worked as a separate financial unit, under the general direction of the central departments. At the head of the central organisation is the Chief Director of Railways, appointed by the Commissariat for Transport with the approval of the Union. He has two chief assistants, each in charge of a main

section of the work—"exploitation" and "supplies." Apart from these operative sections, the Chief Director has three departments working directly under him—the planning and organising department, the Instructors' Department, and the Inspection Department. The work of the planning and organising department is semi-administrative, as it deals with more or less immediate railway operations for the guidance of the Chief Director ; the preparation of general transport plans (covering shipping and road transport as well as rail) is in the hands of the central transport planning department, directly under the Commissariat for Transport. The Instructors' Department of the Railway Administration consists of a group of specialists who act as a flying squad for the introduction of new methods in the various sections of the railway system. The Inspection Department has the special work of inspecting and testing all locomotives, rolling-stock, and other items delivered to the railways from the factories controlled by the Supreme Economic Council.

The first of the operative sections, the exploitation section, is divided into three sub-sections, dealing with traffic, power, and current repairs. The supplies section similarly has three sub-sections, for finance, material, and labour. The "current repairs" sub-section deals only with smaller repairs ; annual overhauls and major repairs are carried out by a separate enterprise. The current repairs section is also responsible for seeing that the rolling stock is properly handled and sent for repairs when necessary. The power sub-section organises the distribution of fuel, and also records and supervises the use of the various forms of fuel. The finance sub-section deals with central accounts and finance, and also with supervising the accounts and financial working of the separate sections into which the railway system is divided.

Outside of this central office for current working, there are two specialised organisations working as independent financial units, under separate managing directors—the Central Board of Repair Shops, which organises capital and major repairs and annual overhauls of stock ; and the Central Board of Railway Construction, which undertakes the building of new lines and major repairs to bridges and buildings.

Each of the functional departments deals direct with similar departments in each separate section of the railway system, giving them general guidance and help—and allocating rolling-stock and supplies generally among these sections. But while there is constant co-ordination and guidance from the central office, the different sections are autonomous, their managers being appointed by the Chief Director at the centre (with trade union consent) but having complete authority within their sections. Just as in the organisation of industries under the Supreme Economic Council, the organisation of the railways combines the maximum central co-ordination with the maximum autonomy at the periphery.

The internal organisation of the sections into which the whole railway system is divided can be illustrated from the "October Railways" section—covering the Leningrad-Moscow and other lines in the west. From April 15th, 1930, the whole section came under the control of a single Director, whose functions are restricted to planning and regulating the work of the seven group lines into which the section is divided. At the head of each group line there is again a single manager, appointed by the Director of the section, but having "full control over the technical, economic, financial and administrative work" of the group. This is a definite move towards decentralisation, and with the decentralised management

goes also the decentralisation of finance and accounting ; each group is a separate working unit, bearing its share of general overhead charges, but left to its own initiative to organise the work and make a surplus on the basis of the traffic rates fixed by the higher authorities (the Central Railways Administration, the Transport Commissariat, and finally the State Economic Planning Commission and the Council of Labour and Defence). The co-ordinating units—the Directorate of the section embracing the various group lines, and the Central Railways Administration supervising the various sections into which the whole railway system is divided—are not concerned in current administrative matters, but only in the general organisation of resources and in giving technical aid to the actual administrative units. All questions of personnel within a group are decided by the manager of that group : the Labour sub-department of the Central Railways Administration secures the necessary labour and organises training, but does not itself make any appointments.

Further sub-division into separate financial units is being organised : below the groups of lines into which each section of the system is divided autonomous and financially independent units are being formed of separate lines, and within these lines again the important stations are becoming autonomous, so far as local traffic is concerned. Each of these units works on the basis of fixed tariff rates—it has not the power to change fares or goods traffic charges ; but the actual organisation of traffic, appointment of staff and accounting are in the hands of each unit. Each unit therefore is in a position to examine its own results and to work on its own initiative to make the service more efficient.

Marine transport was formerly centralised under the

Commissariat for Foreign Trade in an organisation of a Trust character, "Sovtorgflot," the Soviet Trading Fleet. This central organisation directed the work of the four separately managed sections working from Archangel in the White Sea, Leningrad in the Baltic, Odessa in the Black Sea and Vladivostok in the Far East. Agencies in London, Hamburg and other ports worked with each of these four sections of the fleet on a separate basis, but were directly responsible to the central office of Sovtorgflot in Moscow.

In the general reorganisation of industry carried out in 1930 this system was substantially modified. By a decree of the Soviet Union Council of People's Commissaries of February 13th, 1930, Sovtorgflot was liquidated, and an All-Union Combine for Sea Transport was formed, under the name of "Soyusflot." This Combine, working as an independent financial unit under the Transport Commissariat, took over all the assets and liabilities of Sovtorgflot and "Goskaspar" (the Caspian merchant fleet), and in addition "all sea trade ports, including Leningrad, with all buildings and equipment." This does not mean, of course, Customs or political control of the ports, but the management of the harbours, docks, wharves and dock warehouses—roughly the work that is done in London by the Port of London Authority, but on a comprehensive scale—for in Leningrad there are no privately owned docks or warehouses. Soyusflot is responsible for "the management and exploitation of the properties, steamers and other enterprises under their control, the arrangements for new steamers and other enterprises, and control of capital construction in the branch of transport with which it is concerned."

The actual work of the central office of Soyusflot is to control the management of the regional sections of the

shipping fleet, to centralise their finances, to enter into general contracts with Combines or other organisations requiring sea transport, and to plan the development of the marine services. It does not interfere in the current operations of the regional sections, each of which is also controlled by a single manager appointed by the Chief of Soyusflot, subject to approval by the Transport Commissariat and the trade union. The manager of each section has full control over all operations ; he appoints all heads of departments, captains, and other leading employees.

The central office of Soyusflot, as of the other Combines, is organised on a functional basis : the planning department, the allocation of ships, the requirements of new ships, docks and dock warehouses, loading and discharging equipment, etc. ; but more general plans—the extension of the transport system as a whole, in which shipping is only a part—are prepared by the central Transport Planning Department, directly subordinate to the Transport Commissariat. Other departments of Soyusflot deal with ships' management, technical questions, passenger traffic, cargo traffic, etc. ; these departments are not administrative, but supervisory and co-ordinating, actual administration being the concern of the heads of the regional sections.

The actual construction of new tonnage (both sea and river) is carried out by the Shipbuilding Combine, which is an industrial unit under the Supreme Economic Council. Orders are placed with the Shipbuilding Combine by Soyusflot, and the new ships are paid for from the reserved profits of Soyusflot or from loans raised by Soyusflot from the banks.

A similar Combine was set up in February 1930 to manage the river shipping ; it took over all river steamers

formerly run by a department of the Transport Commissariat, and all wharves and warehouses used for loading and discharging operations at river ports.

Inland motor transport, forwarding and warehousing are controlled by another Combine under the Transport Commissariat. This is technically a company with share capital held by the Transport Commissariat, the Supreme Economic Council, the Trade Commissariat, and the Centrosoyus (central union of consumers' co-operatives), all of which are directly interested in road transport. The operations of the Inland Transport Combine are, however, under the supervision of the Transport Commissariat, although the plans of work are prepared jointly with the other shareholders. The warehouses of the Inland Transport Combine are only those for general goods ; cold storage warehouses come under the Meat and Milk Combines ; grain elevators belong to the Grain Combine ; station warehouses used only for short periods belong to the railways, and warehouses used for goods in transit, in connection with the loading and discharging of ships, come under the Sea and River Transport Combines. The chief work of the Inland Transport Combine is the organising of motor transport between towns and villages and railway stations, and forwarding operations generally.

The chartering of ships, forwarding operations outside Russia, and agency work for Soviet steamers in foreign ports, are all undertaken by the Freight Combine, which is also under the Transport Commissariat. This Combine has taken over the work of the "Freight Bureaux," formerly under the Foreign Trade Commissariat, and also the forwarding and agency work formerly carried out by agencies of Sovtorgflot.

Thus the whole of Russia's transport, both internal and external, is organised in five autonomous and financially

independent Combines under the Transport Commissariat, while the work of each Combine is co-ordinated not only through the general Board of the Commissariat—on which the heads of each Combine sit—but also by the Central Transport Planning Department, whose work is to supervise the separate Combines and to plan the development of transport, allocating the work to the different Combines.

The general idea of planned production and distribution has special importance in relation to transport. To take the single example of the oil industry, the increase of output from twelve million tons in 1928-29 to forty million tons in 1932-33 involves provision for an increase in transport facilities of over 200 per cent. So far as internal transport is concerned—the external transport required can be met mainly by the use of foreign tonnage—rapid development must be made in three directions : pipe-lines must be built or extended ; the oil-carrying fleet on the Caspian and Volga must be increased ; and large numbers of new tank wagons on the railways must be provided, and new lines must be built. All of this involves careful preparation of transport plans years ahead, and these plans must affect the plans for other industries, especially metals and engineering.

But the planning of future transport facilities needed for each particular industry is not the only problem. Such questions as relative costs of rail, water and road transport between certain points, and the corresponding allocation of traffic, need continuous attention, and they can only be satisfactorily settled by a central planning department. Of even greater importance from the standpoint of economical transport is the question of return freights, which may sometimes involve changes in the source of supply for goods for certain areas. The planning and building of the "Turksib" railway, to bring raw cotton

from Turkestan to Siberia, and to take back grain from Siberia to Turkestan, is a case in point. Another case, in which the relative cheapness of water transport, the overloading of existing railway lines in the south, and return freights are all factors which had to be considered, is given in a decision of the Transport Commissariat on the use of the Volga. Instructions issued in February 1930, to guide the development of the River Transport Combine, are to the effect that the following goods previously moved by rail are in future to be brought along the Volga :

Grain from the Northern Caucasus and Siberian districts near the Volga, for transport to the Central Region.

Metal and engineering products from Eastern Ukraine factories, for transport to Moscow, Leningrad, Central Asia and Transcaucasia.

Ores from the Urals for Eastern Ukraine factories and for the Central Region.

Sugar from Eastern Ukraine for the Volga basin and Siberia.

The River Transport Combine was accordingly instructed to prepare to deal with this traffic, and to take the necessary steps to build additional ships, wharves and warehouses, and to mechanise loading and discharging in order to save delay at the ports. An even wider question is the geographical distribution of industry. In the case of the cotton manufacturing industry, for example, the further developments of the industry in the centre of European Russia would add to the already immense difficulties of transport of raw cotton from Turkestan. The building of the Turksib railway helps the first stage, but it links up with the Siberian railway, along which

grain and wood are also moving to the industrial centre of European Russia. With a vast industrial area in central Russia, this movement of raw materials and food in one direction is inevitable. The transport problems arising from this have to be considered, and, apart from the actual traffic arrangements year by year, other solutions have to be worked out. The solution is found, in cotton and in other industries, by the joint work of the planning departments of the Supreme Economic Council and of the Transport Commissariat. The transport of raw cotton can be reduced by building the new cotton spinning and weaving factories required, not in the centre of European Russia, but in Turkestan—near to the point where raw cotton is produced and where there is a sale for the manufactured products. From the standpoint of the national economy as a whole, an immense saving of resources and labour is made by such a geographical distribution of new enterprises.

Moreover, once this general principle is adopted, the whole character of transport begins to change. Long distance lines, bringing food and raw materials from peasant areas to industrial areas, and bringing back manufactured products, gradually lose their importance ; developments take the form of extending the local network of lines, to serve a number of separate industrial centres. There will, of course, always be some products, such as oil, which are found only in certain areas and are required all over the country. But even in such cases technical developments may make very considerable changes. The production of electricity at the great stations which are now being built, and its long-distance transmission, will do away with many of the present problems in the transport of coal, while the electrification of railway lines, already begun, will further simplify coal transport.

The work of the Central Transport Planning Department is therefore closely linked up with that of the Planning Department of the Supreme Economic Council and of the State Economic Planning Commission. Together they are not only simplifying transport problems, but organising a new geographical distribution of industry. In this new distribution, the "economic region" is the fundamental idea : the division of Soviet territory into a number of regions, which will be largely independent of each other so far as raw materials and food are concerned, but will exchange their specialised products. With such regions in being, the whole problem of transport would be immensely simplified.

CHAPTER X

COMMUNAL INDUSTRY

In every large town there are certain enterprises, such as Gas, Electricity, Water Supply, and Tramways, which are controlled by the Town Soviet. In some towns these enterprises were controlled by the Town Councils even before the Revolution, and in others they were taken over when the Soviets began to control the general administration of the town. In the early period of the Revolution, when the privately owned factories in every industry were being nationalised, many of the Town Soviets took over enterprises of an ordinary industrial type as well as those concerned with what are usually known as communal services. In the subsequent process of reorganisation and centralisation the important factories of an ordinary industrial type which had been taken over by Town Soviets were transferred to the control of the Supreme Economic Council, while less important factories of this type were given to the Provincial Economic Councils. At the present time, therefore, enterprises controlled and managed by the Town Soviets are in the main those providing for communal services, although the Soviets also control, in the larger towns, some enterprises of an ordinary industrial type which are auxiliary to one or other of the communal services.

The system of administration of these communal services is fairly uniform in the larger towns. The Town Soviet, the local authority, consists of delegates elected by the workers at each important factory in the town, with other delegates elected on what may be called a

“ward” basis. The Town Soviet is a large body—in Moscow, for example, it numbers several hundred members—and the current work is done by a presidium or executive elected by the Soviet. The members of the presidium are salaried executive officers, each in charge of a particular section of the Soviet's work, whether social or economic. On the economic side, for example in Moscow, the chief communal enterprises are Gas, Electricity, Water, Tramways, and Housing. One member of the presidium is in full charge of each of these. He is the sole person responsible : there is no committee, other than the general presidium, to which he reports. Each economic enterprise is financially independent and self-supporting, and the surplus, after providing for depreciation and development, is brought into the funds of the Soviet which are used for general administrative purposes.

Under the member of the presidium responsible for each department—the general manager—there are the managers of the various works or depots, who are appointed by the general manager subject to approval by the presidium as a whole and the local trade union organisation. Each works or depot is run as a separate accounting unit, involving a separate clerical staff. Work such as repairs and construction of new vehicles, which is done by one workshop, is charged out by the particular workshop on the basis of a schedule of costs, so that the separate accounting and costing is carried right through. As in all industrial undertakings, there are factory or depot committees which are the basic units of the trade union organisation ; their functions are primarily to safeguard the interests of the workers, but they also have the usual economic functions of discussing the management and the organisation and technique of the undertaking and bringing forward suggestions for improvements.

In the case of municipal housing, the member of the presidium responsible for this department has control, and under him there are various technical inspectors, whose duty it is to see that the houses are properly maintained.

The system of leasing and management of municipal buildings (shops and offices as well as dwelling-houses) has gone through a number of stages, and is not uniform throughout the country. In the first period after the Revolution the Town Soviets assumed full control and financial responsibility, and the payment of rent, even in the form of a small levy to cover the cost of maintenance, was practically unknown. With the adoption of the New Economic Policy in 1921 efforts were made to put all municipal departments on an economic footing, and at the present time the Housing Departments are expected not only to maintain existing buildings out of the income from rent, but also to provide, in part at least, for the extension of housing accommodation.

The policy of decentralisation applied to industry in general finds its application to municipal housing in a Decree of May 4th, 1930, issued by the Soviet Union Council of People's Commissaries. From October 1st, 1930, the direct exploitation of housing by departments of the Town Soviets was to be terminated, and the system of leasing (already widely used) to become universal. Under this system the Housing Department of the Town Soviet is responsible for leasing all municipal property to companies, groups or individuals, and for seeing that the conditions of the lease are carried out. There are four main types of tenants of municipal property :

(1) State and other public institutions, using buildings mainly for offices, though also in many cases

assuming responsibility for blocks of flats or large houses for their employees.

(2) Business concerns—State combines, municipal, co-operative, and privately run enterprises—using buildings mainly for offices and shops.

(3) Housing Trusts—organisations set up by the Town Soviets at an earlier period, as a first attempt at decentralising administration of municipal property ; they are, in effect, sub-departments of the Housing Department, looking after particular areas or groups of buildings on a separate financial basis.

(4) Housing Co-operatives—organisations of tenants who through these Co-operatives assume collective responsibility for the leasing of large houses, blocks of flats, or groups of smaller houses.

(5) Individuals—who as a general rule are allowed to lease only small houses for their own occupation without sub-tenants.

In all cases the leases provide for payment of a definite rent and for repairs and maintenance to be carried out by the tenants. The Housing Trusts are regarded as a wrong form of organisation, as they involve a semi-bureaucratic administration of the houses controlled, without participation by the tenants. New Housing Trusts are therefore being formed only in exceptional cases, and attempts are being made to let all dwellings to Housing Co-operatives, through which all the tenants are jointly responsible on current questions of administration and repairs and maintenance ; while they are collectively responsible for the rent to the Housing Department of the Town Soviet and for other services—water, electricity, etc.—to the corresponding municipal departments. The purpose of the rent fund is, firstly, to cover the Housing Department's

administrative expenses, and, secondly, to provide for new buildings. The construction of new dwelling-houses is carried out by the Housing Department, although it frequently makes agreements with co-operative groups to build houses for their own use.

The Town Soviets are completely autonomous in current administrative matters, and are financially independent ; but there is a central authority which supervises their activity and issues general directions in order to secure a certain degree of uniformity in important questions. This central authority is the " Board of Communal Economy " under the Home Affairs Commissariat of the Soviet Union ; and there are corresponding Boards under the Home Affairs Commissariats of the separate Republics forming the Soviet Union. It is through these Boards that the general development of communal services is directed and planned, though without interference with local autonomy so long as the general laws of the Soviet Union are observed by the local Soviets.

Most of the communal services are purely local in their character, and do not directly affect industry in general ; they are therefore provided for only in the local industrial plan. But in so far as communal services are consumers of industrial products—for example, of machinery and equipment, rails and wire for tramways—their budget of requirements must enter into the general industrial plan. Each communal department has therefore to prepare a plan, not only for the guidance of the local undertakings, but also for incorporation in the economic plan for the country as a whole. For similar reasons the output and development of municipal electrical undertakings supplying power to industry must be taken into account, and questions of local transport, especially for housing extensions, must be settled in conjunction with the Railways

Administration. In all of these matters the Provincial Economic Councils, the local Economic Departments, and the central Boards of Communal Economy provide the channels through which the plans of the various Town Soviets are co-ordinated and brought into the general plan of industry as a whole.

CHAPTER XI

CO-OPERATIVE PRODUCTION

In all countries in which agriculture is the basic industry, petty production is widespread in the villages. Partly owing to the undeveloped state of large-scale industry, and partly because of the heavy cost of transport and the organisation of distribution over vast agricultural areas, the old forms of production still survive in the Soviet Union—production by the peasants in the winter months, and in small workshops serving purely local needs. In addition to petty production in the villages there is also, side by side with large-scale industry, a considerable volume of petty production in small workshops in the industrial areas. The survival of handicraft and small-scale production in industrial areas is also in some measure due to the slow development of large-scale industry ; but it must be remembered that this is not a special characteristic of a backward industrial country. Small-scale production still exists in Britain in many industries making or finishing articles for general consumption, and in Germany in 1925, 22 per cent. of the total number of industrial workers were employed in workshops averaging not more than five workers each ; these were chiefly in the clothing, food, furniture and building industries.

The number of persons regularly engaged in handicraft and small-scale industry in the Soviet Union was estimated at 4,700,000 in 1928. The number of workers in

large-scale industry (i.e. enterprises employing over 30 workers without machinery, or 16 workers with machinery) was 3,033,000 ; yet large-scale industry produced approximately 85 per cent. of the total value of industrial output. The low annual output per head in petty as compared with large-scale industry is due primarily to its lower technique—as a rule, only simple tools are used, and there is very little power-driven machinery—but the fact that petty production is usual in seasonal industries also plays an important part ; in the Soviet Union it is estimated that the average “ season ” of small-scale industry is only twenty weeks in the year.

The existence of this large volume of small-scale production in the Soviet Union presents many difficulties in the general organisation of production and distribution. It is true that small enterprises work as a rule for purely local markets ; but, on the other hand, they are consumers of raw materials and semi-manufactured products which have to be taken into account in the general plan. There is also the important point that small-scale production is almost always uneconomic : in so far as there is no competition from large-scale enterprises in that particular branch of production, the prices of goods made in small workshops remain high, and affect the general cost of living. The quantity of labour put into handicraft production is five or ten times the quantity required when machinery and modern methods are used ; and the working hours of persons engaged in handicraft production are long, and even when they are working for themselves their earnings are miserably low. In such conditions the development of large-scale industry in those branches of production where petty industry still survives must altogether destroy the basis of existence for the small workshops and handicraft production generally, creating

a form of unemployment which is characteristic of industrial growth in every country. The Soviet Government had to take these factors into account in determining the form of organisation which should be encouraged in small-scale production ; and it had also to bear in mind that there was a limit to its own power of organisation ; as was shown in Chapter II, one of the essential features of the New Economic Policy in 1921 was the concentration of State organisation on the larger enterprises, because of the difficulty of organising and administering the great mass of small enterprises which had been nationalised during the civil war.

There is another factor which is of special importance from an immediate practical standpoint : although the value of petty production is only 15 per cent. of the total value of industrial output, yet it supplies a considerably greater proportion of the industrial products required for consumption—in the case of certain products such as clothing and furniture over 60 per cent. of the total is produced by small concerns. To attempt to start large enterprises in these branches of industry, apart from the social results in increasing unemployment, would involve a considerable outlay of capital, while all available capital is more urgently required for the expansion of heavy industry and the improvement of technique in existing large-scale enterprises in all industries.

The form of organisation which the Government is encouraging is therefore co-operative production, which not only facilitates organisation and planning, but also enables the technical level of small-scale industry to be raised. The problem is not unlike the problem of remodelling peasant production in agriculture. In both cases the co-operative form of production maintains the existing number of persons engaged in production, while it

increases their output through the joint use of machinery, and at the same time it makes it possible to prepare and carry out a plan of work. Co-operative production in petty industry also has the advantage of linking up production with the market in the form of distributive or consumers' Co-operative Societies. This not only facilitates sales and brings better prices to the producers, but it also widens the area of sale for particular products and enables specialisation to be developed—which in turn facilitates the use of machinery and modern methods of production generally. The ultimate result of this must be the transformation of petty industry into relatively large-scale industry ; but the process will be gradual, the cheapening of production will constantly widen the market, and there will not be the general economic conflict of large-scale town industry with village industry which results in widespread unemployment in the villages. Moreover, the development of co-operative productive enterprises, of a relatively high technical level, is also considered useful from the standpoint of the future distribution of industry. The general policy is to break down the sharp line of division between the towns, as immense aggregates of large-scale enterprises, and the villages as consumers of town products ; what is wanted is the growth of medium-sized enterprises serving the needs of relatively small districts or regions. This is obviously impossible in industries such as coal, oil and metallurgy, the local distribution of which is determined by the sources of supply ; but in the light industries, and particularly in industries producing articles of consumption in their final stages, a wide distribution is perfectly possible, and in the case of certain branches of production may be even as economic as highly centralised production. It is true that certain economies are effected by production in large-scale enterprises ; but,

on the other hand, the costs of transport and centralised organisation are compensating disadvantages in industries such as clothing, furniture and food products.

It is precisely in such industries that small-scale production still survives to an important extent. Approximately half of the small-scale production in the Soviet Union is in the form of food products, while other important groups are clothing, boots and shoes, woollen textiles, basket-making and woodworking, and in the villages there is also some metal-working. Of the total number of persons engaged in petty production, 1,200,000 are in towns, scattered among 350,000 enterprises (averaging less than four workers each), and 3,500,000 are in the villages. Eighty per cent. of the total are individual producers ; and even in the towns only 15.8 per cent. of the persons engaged in small-scale industry are hired workers.

Organisation of these petty producers in co-operative producing societies has already made considerable progress—in 1930 it was estimated that 38 per cent. of the total value of small-scale industrial production came from co-operative groups ; in addition, 6.8 per cent. of the total came from State-owned enterprises—mainly controlled by local Soviets and working in connection with local services. The co-operative groups work in conjunction with the consumers' Co-operative Societies, which as a rule take the initiative in forming the producing societies, lending them the capital required for the purchase of machinery and raw materials, and taking over their products for sale through the local Co-operative Stores. As the network of Co-operative Stores extends, squeezing out the individually owned retail shops, the individual handicraft or small-scale producers are being more and more compelled to look to the Co-operative Stores as the outlet for their products ; and as the Co-operative Stores

give preferential treatment to co-operative producing groups there is a constant economic pressure on the petty producers to form co-operatives. Most of these new organisations are small and inadequately equipped ; but they are at any rate elementary forms which will develop, and even at present their existence simplifies the distribution of raw materials and semi-manufactured articles to be worked up by petty industry, while their products are drawn into the co-operative distributing machinery.

Apart from these groups of co-operative producers, working as separate units and selling their products to the consumers' Co-operative Societies, many important industrial enterprises are owned (or leased from the State) and run by the large consumers' co-operatives or unions of co-operatives. In 1929-30, 9.6 per cent. of the total value of output of large-scale enterprises (employing over 30 workers without machinery, or 16 with machinery) came from enterprises owned or run by Co-operative Societies. As in the co-operative organisations of other countries, such enterprises are owned either by a single society or by unions of societies ; their managers are appointed by the Board of the society or union concerned, and their output is sold to the Co-operative Societies for sale to the ultimate consumers. These enterprises have been leased from the State or built up independently by the consumers' societies in order to ensure supplies of certain products not obtainable, or not obtainable in sufficient quantities, from State-owned enterprises ; they are naturally confined to articles of consumption, and they do not compete with State enterprises, as they produce for well-defined markets. In the whole scheme of organisation of industry such enterprises play an important part ; they relieve the apparatus of State industry from having to organise and administer production in

branches of industry which can very well be managed locally, and the funds for their extension come from the co-operative organisations and do not have to be provided by the State.

The most important enterprises owned by the Co-operative Societies are the immense central bakeries which they have established in large industrial towns. Approximately 50 per cent. of the bread consumed in industrial centres comes from co-operative bakeries ; in Leningrad and Moscow the co-operative bakeries are to provide all requirements by 1933. Practically all of the co-operative enterprises are engaged in making food products of one kind or another—sausages, oils and fats, dried and tinned fruit and fish, confectionery, etc. The supply of all food products is still considerably below the demand, and the co-operatively owned enterprises are extending each year, largely in conjunction with the spread of co-operative restaurants in the factories. Although the capital is usually provided by the Co-operative Society, in some cases, as for example in the new central bakeries, the local Soviets provide a part of the initial capital required.

In the chapter dealing with agriculture the various forms of agricultural co-operative organisation are described. Many of the agricultural co-operatives which were formed primarily for the collection and joint sale of agricultural produce also developed activities of an industrial nature, chiefly in the form of working up products for the market—butter-making, cotton-ginning, tobacco-curing, etc. The most important section was flour-milling : in 1929 the Central Union of Grain Co-operatives controlled directly or indirectly 200 large and 1,500 small mills. The central unions of other specialised agricultural co-operatives similarly controlled large numbers of industrial establishments. But there was no special advantage in the

co-operative form of organisation for running such enterprises, which had to be co-ordinated with other State-owned concerns ; and in the general reorganisation of industry which was carried out in 1930 the larger enterprises working up agricultural products were handed over to the Combines (Grain, Milk, Meat, etc.) working under the Commissariat for Trade. At present, therefore, apart from enterprises serving purely local needs, the agricultural co-operatives do not engage in industrial activities, and confine their work to the collection of produce, which they sell to the Combines for working up and passing on to the consumers' societies, for sale to the ultimate consumers.

In general, the co-operative form of organisation, so far as productive enterprise is concerned, has been encouraged for production to meet purely local needs of articles of consumption, but has not been encouraged as an alternative to State management in industries and enterprises working for a widespread market. It is true that, from the standpoint of organisation and planning, every form of co-operative undertaking is an advance on scattered production in the hands of private individuals. But real co-operative production—with joint ownership of the means of production, joint working, and joint interest in the sale of the products—is limited to comparatively small enterprises ; while the ownership and management by large consumers' Co-operative Societies of enterprises working on the basis of hired labour only has advantages in so far as the enterprises are directly supplying the needs of the societies concerned. The ownership and management by separate Co-operative Societies of enterprises working for the general market would lead to the same kind of competition and confusion as existed between the various State Trusts in the first period of their

existence ; while ownership of such enterprises by Central Unions of Co-operative Societies has no advantage which State ownership could not offer, and there would always be a certain field for conflict between such enterprises and State enterprises.

For these reasons enterprises working for the general market are organised in industrial Combines under the Supreme Economic Council or Commissariat for Trade ; the co-operative form of organisation is used mainly for the marketing of produce and for retail distribution ; on the productive side it is used, both in agriculture and in small-scale industry, as a means of building up larger units of production, and in branches of industry producing articles of consumption it is used to organise relatively large-scale production for local needs.

CHAPTER XII

ORGANISATION OF AGRICULTURE

Whatever the difficulties may have been in bringing organisation into the manufacturing industries, they were insignificant in comparison with the obstacles which the Soviet Government had to face in agriculture. At the time of the fall of the Tsardom in March 1917 there were some twenty-five million peasant farms in the area now included in the Soviet Union, with a small number of large agricultural estates. The peasants were not only hostile to any form of organisation : they were for the most part illiterate and incredibly ignorant of modern methods of agriculture. The agricultural estates of the large landowners were the only units in agriculture which employed even the most elementary scientific methods and machinery. Even the richest among the peasants, the *kulaks*, whose farms were relatively large and who employed numbers of hired workers, had no knowledge of the use of agricultural machinery. There were also the "middle peasants," with enough land to win from it a precarious living ; and finally there were the "poor peasants," whose plots of land were so small that they could not support a family without the aid of wages earned on the landlords' estates or the *kulak* farms. Such was the confused mass whose production had to be organised so that it might enter into the scheme of planned production for the country as a whole.

By the time of the November revolution in 1917 and

the formal nationalisation of the land which was immediately carried out, considerable changes had already taken place in the distribution of land among the peasantry. Many of the larger estates had been seized by the peasantry in a series of agrarian revolts during the summer. The seizure of land by the peasantry and the landless poor in the villages continued after November 1917, and the Soviet Government realised that the general effect of this process would be to diminish agricultural output and postpone the raising of agriculture to a higher technical level. The Land Law, issued in March 1918, therefore aimed at regularising the distribution of land among the peasantry, and at the same time preserved the larger farms as State farms, while encouraging the use in common or joint cultivation of land by villages or groups of peasants within the villages. The growth of organisation in agricultural production has therefore taken two main forms—State farms and various forms of co-operative farming.

These forms of organisation have had a very practical and immediate economic purpose in addition to the general purpose of creating the basis on which planned work could be built. The low technical level of agriculture on small peasant farms is known everywhere ; the peasant and his family must make up for their backward technique by an eternal toil which barely keeps them from starvation year by year. With this low technique even an increase in the peasant's holding brings little relief ; the peasant tends to produce little more than he and his family need for consumption. The enlargement of holdings and the sweeping away of rent and taxation which followed the revolution, so far as the poor and the smaller " middle " peasants were concerned, gave them relief as individuals ; but it did not lighten the economic problem of providing food for the increasing number of workers in industry and

their higher standard of living. On the contrary, even when agriculture reached the pre-war level of production, the quantity of grain available for the towns—the surplus marketed by the peasants—was considerably smaller than before the war, just because the poor and middle peasantry were now living at a higher level, while the total output of agriculture had not increased. The building of some form of organisation was therefore essential, as it would help to bring modern methods into agriculture and thus raise the total output, of which a larger proportion would be surplus to the peasants' needs and would be available for purchase to meet the needs of the town population.

Moreover, the forms of organisation which made possible the improved technique, and therefore a saleable surplus as the result of each individual's greater output, at the same time make possible the accumulation of capital required for the utilisation of modern methods. Even the large *kulak* farms could hardly accumulate, from the sale of the surplus products drawn from hired labour, enough to purchase tractors and reapers and binders, and to instal modern cow-sheds and dairy equipment. Large-scale production and joint accumulation from many households could alone provide this capital. A surplus of agricultural products for the towns, and the use of the money drawn from this surplus as capital for the improvement of agricultural methods—these were the fundamental economic principles of the Soviet Government's agricultural policy, which found concrete expression in the State farms and co-operative farming.

But the whole process of organisation could not develop until at least enough capital had been accumulated to make a start—and agriculture itself could not provide that capital. For many years, therefore, there were only the smallest beginnings of organisation in agriculture, and

it was only when the general level of industrial production had reached and passed the pre-war level—that is, after 1927—that any considerable results were obtained. Industry in general had to provide sufficient accumulation to give or grant on credit the agricultural machinery and equipment which would make large-scale farming possible, and thus develop a surplus within agriculture itself on which further agricultural development would be possible. But the general forms of organisation for large-scale farming were adopted and introduced from the early days of the Revolution.

The State farms at first consisted of the large estates of the former landowners, which were held by the Soviet Government to prevent the dissipation of their resources and to preserve the advantages of such large-scale agriculture as already existed. These Soviet farms were administered through the Commissariat for Agriculture and its offices in the various provinces and districts. They were run primarily as model farms, and were centres from which the general propaganda in favour of large-scale farming was disseminated. At first they were very poorly equipped, and inexperienced management delayed their progress ; but here and there they developed successfully and achieved the combined purpose of increasing the level of output (as compared with that of the peasant farms), supplying a surplus to the towns, and converting that surplus into agricultural machines and equipment.

In 1922, following on the general organisation of industrial concerns into Trusts and Syndicates, 1,134 of the largest and most efficient State farms were put on an independent financial basis and combined to form the State Agricultural Trust. The smaller State farms were not included in the Trust, and were left to the direct supervision of the provincial agricultural departments

(offices of the Commissariat for Agriculture in each province). The lack of capital and the fact that the average size of even the larger farms was too small for really large-scale methods prevented development ; moreover, the original State farms were estates in thickly populated areas and were ringed round by peasant farms, and it was not the Soviet Government's policy to convert peasant farms into State farms. From the very first the idea of forcibly converting peasant agriculture into State agriculture had been repudiated as impossible from the economic as well as from the political standpoint.

The development of State farming since 1928 has therefore had to take the form of setting up new Soviet farms in unworked areas, in the main in virgin soil and in areas subject to drought, and therefore with no settled population. By 1930, 125 of these new Soviet farms had been created ; the total sown area of the Soviet farms was 8,856,000 acres, and their output of marketable grain (beyond their own needs) was estimated at three million tons. On the new estates alone 10,000 tractors were employed, and 1,550 combines.

The new estates (mainly arable farms) were organised and financed by the Grain Trust as a part of its general work of developing grain production. Each of these vast estates is under a single manager, and is divided into sections under sub-managers to make administration easier. At the same time, the sections all make use of the common services—tractors and other machinery, fertilisers, scientific survey and expert advice—which are centralised under the manager's control. Each estate works on an entirely independent financial basis, selling its surplus produce to the Grain Combine at the normal fixed prices.

The most ambitious attempt in the organisation of

State farming is the "Gigant" farm in the Northern Caucasus. Half a million acres of steppe land, previously uncultivated and used only here and there for grazing, were set aside for working as a "grain factory." The decision was taken in May 1928 ; in July an organisation committee began to function and a manager was appointed. Tractors were provided as a part of the working capital, and work was started immediately. Next year the *Frankfurter Zeitung* correspondent reported :

" I saw this grain factory in the early summer, when the ears of grain were already nodding in the fields. For hours we drove in an automobile through an immense area of waving green which reached as far as I could see. There were no houses and no trees to break the immense area of grain which covered alike the hills and valleys all around. In the centre of the great farm were a few modest administrative buildings and tremendous workmanlike sheds for the tractors and other agricultural machinery."

In the first year (1929) this farm produced 50,000 tons of wheat from approximately one-third of the total area which will eventually be worked.

State " grain factories " are of immense importance in the general organisation of agricultural production. The use made of them to inspire the peasants to join Collectives as a step to large-scale farming can be illustrated by the fact that in 1929 the Gigant farm was visited by 50,000 peasants. The farms are showing the practical possibility and advantage of large-scale production organised in units which can easily be controlled and directed by a central body. At the same time, the Soviet farms have been formed either from the estates of the former large

landowners or from hitherto uncultivated land. The immense number and variety of the peasant farms—some twenty-five million—were not affected by this form of organisation.

The agricultural co-operatives which have grown up among the peasant farms are of every conceivable type. In the earlier period they were mainly joint sales organisations for particular products : the peasants in a village would form a co-operative organisation for the sale of their butter, flax or other produce. But even in the early period some Co-operative Societies were formed in order to secure and maintain agricultural machinery which was to be used in common. In a few cases groups settling on the land founded Communes, in which all property was held in common, and the work and produce were equally divided among the members. But on the whole both these Communes and the Soviet farms lay outside the normal agricultural system, which was still carried on by separate peasant households ; and although the formation by the peasants of co-operatives for the sale of products was a step forward in economic organisation, the system of production on small individual farms was a serious hindrance to Russia's economic life. It was therefore essential to develop joint productive organisations.

These organisations are all known as "Collectives," but there are three types—the Commune, the Artel, and the simple Collective. The most developed form, the Commune, in which all the means of production and property generally (i.e. including live stock, houses, etc.) are held in common, exists principally in cases where new land has been opened up by groups of settlers from industrial areas. In the existing peasant villages joint productive organisation has grown up without any general pooling of property, the Collective being based

on the joint working of arable land or other limited co-operative work. The Artel is the third form of productive organisation, intermediate between the Collective and the Commune ; its scope is wider than that of the ordinary Collective, in that it covers a general pooling of certain means of production ; but it differs from a Commune in that it is built up on a share basis, the individuals or households concerned drawing from the aggregate production in proportion to the area of the land surrendered or the labour performed.

Whatever the form of the joint productive organisation, the management is in the hands of a committee elected by the individuals or households concerned. It is the practice also to elect an Auditing Commission, to audit the accounts and returns and ensure the proper distribution of the products in accordance with the agreement on the basis of which the joint organisation was formed. In the larger forms of Collective the members of the management committee are freed from productive work, in order to enable them to give full attention to the work of organisation.

Where the Collective establishes a new factory (bacon-curing, butter-making, etc.) the committee usually appoints a qualified manager from outside the village ; and the larger Collectives also employ agricultural experts on a salaried basis.

In general, joint productive organisation is more widespread in grain growing areas than in other agricultural areas. In grain areas the advantages of collective working, with the use of tractors involving the breaking down of barriers and large-scale cultivation, are obvious. Moreover, it is possible to form a Collective for the joint working of land and distribution of the product without any great capital outlay ; in many cases " tractor sections " can be

hired to do the necessary work in return for a fixed percentage of the harvest, and in other cases credits for the purchase of tractors are available, through the State or Co-operative credit institutions. When such Collectives are first formed, fields used for market gardening or other special purpose are generally not included in the agreement, and the individual peasants or households still retain all or some of their livestock.

Where dairy-farming is the chief form of agriculture the difficulties of organisation are much greater. In order to get real advantages from collective working a very considerable outlay on buildings and equipment is required, and the permanent employment of experts is necessary from the start. The tendency in dairy-farming is therefore towards the formation of co-operatives for the sale of products rather than for actual production. At the same time, a successful Sales Co-operative often develops into a producing organisation, setting up its own factory for the working up of products, and eventually building central cow-sheds and transforming a whole village into a producing Collective.

In the same way a Collective originally formed only for the joint working of grain land frequently begins other activities as well and is eventually developed into an all-embracing productive unit for a whole village, first by collectivising the working stock in connection with joint cultivation of grain, and then drawing into the Collective organisation the dairy stock, market gardens, and other forms of production which the peasants were at first unwilling to collectivise.

The general principles for the formation of agricultural collectives of the intermediate form (Artels) have been issued by the Commissariat for Agriculture in the form of model statutes (see Appendix IV). These are of special

importance as the basis on which more than half of agriculture is already organised. Membership of the Collective is, of course, voluntary ; it is open to anyone over sixteen years of age whose application is approved by the general meeting or management committee. There is an entrance fee in money, assessed on the value of the individual's property or on wages in the case of wage-earners. The general meeting, which is the ultimate authority, takes the form either of a mass meeting or, where the Collective is of considerable size and embraces a number of villages, of a delegate meeting ; it elects the management committee for the ensuing year. It also elects an Auditing Commission which, in addition to auditing the accounts, is responsible for seeing that the management committee works in accordance with the statutes.

The paragraphs dealing with the land run as follows :

“ All boundary strips dividing the land holdings of members of the artel shall be abolished and all plots of land thrown into one large area of land to be used collectively by the artel. While all land holdings are fully collectivised, the land immediately surrounding the houses (vegetable gardens, orchards, etc.) remains for individual use, although if necessary the size of the gardens can be altered, by a decision of the management committee confirmed by the general meeting. The area of land belonging to the artel must not in any circumstances be reduced. The allotment of land, to members leaving the artel, from the land belonging to the artel, is prohibited ; members leaving the artel can receive land only from the land reserves of the State.”

It should be noted that the last sentence is directed only against individuals who wish to leave the artel while the

others wish to carry on ; the artel can be dissolved and the land returned to its former holders if the general meeting so decides. There have been cases of artels being dissolved by their members, as a rule owing to bad organisation or an inadequate supply of tractors—that is, owing to the failure of the artel to produce the material advantages which the members had been led to expect from this form of organisation.

In addition to the collectivisation of the land, the chief means of production in the possession of members are handed over to the artel—agricultural equipment, draught animals, livestock producing marketable commodities, farm buildings, and equipment (such as separators) for working up products ; seed stocks, and fodder required for the collectivised animals. “ The dwelling-houses of members of the artel are not collectivised ”—and there are other provisions for leaving the members what they individually require—smaller tools and implements required for the gardens and orchards, poultry, one cow for each household, etc. ; and the management committee is given authority to set aside from the collectivised draught animals a certain number of horses for individual use by the members. Where pigs and sheep are collectivised, the management committee may leave a certain number of these for individual use.

Together with the collectivisation of the land and the chief means of production, labour is also collectivised. All members have to take part in the work required, according to rules drawn up by the management committee, which lays down standards of work and wages for various categories, both at time and piece rates. The sums earned are credited to the members, and may be drawn by them (usually in kind) up to 50 per cent. of the amount standing to their credit ; a final settlement is made in September,

after the realisation of the harvest. Experts—agronomists, engineers, etc.—may be employed for wages; and additional labour required for sowing or for the harvest, or for building work, may also be paid wages immediately. Permanently or temporarily disabled members of the artel are maintained by the artel, in accordance with rules drafted by the management committee and approved by the general meeting.

At the end of the harvest year (September 30th) the income of the artel is recorded, and against it are set the current expenses, including wages, and allowances to incapacitated members. From the net surplus thus arrived at, a certain percentage (fixed by the general meeting) is set aside for the “indivisible fund” of the artel—the fund on which individual members have no claim. This fund is the capital reserve, for the purchase of tractors and other machines, for new buildings, etc. The balance is shared out, usually in proportion to work done.

The final paragraph links up the artel with the general collective movement :

“The artel is a member of the Union of Collective Farms of . . . and works under its supervision. On the basis of its production plan, the artel enters into a contract with the Union of Collective Farms by which it undertakes the organisation of agricultural production and the systematic delivery of marketable products to the State and Co-operative organisations; while the Union of Collective Farms undertakes, with other State and Co-operative organisations, to supply the artel with means of production and articles of consumption and to arrange credit and organise agronomic aid for the artel.”

As already indicated, the co-operative organisations are chiefly concerned in the building up of joint sales (and purchase) societies among groups of peasant producers, who retain their individual farms and work in isolation from each other. These village co-operatives are linked up either with the general agricultural Co-operative Societies or with specialised societies. The general agricultural co-operatives are linked together in the central "Selskossyus"—the Central Union of Agricultural Co-operatives for the whole Soviet Union. There are also specialised Central Unions for village co-operatives selling flax, butter, and grain. In all cases the societies are distinct in finance and administration; there are "Unions of Societies," but there is no form of central management or control of the local societies, although naturally the central societies are constantly endeavouring to extend the network of local co-operatives, and are providing credits and other forms of assistance to help and encourage the formation of local societies.

One of the chief means of encouraging the formation of local producing Collectives (as distinguished from joint selling co-operatives) has been the organisation of "tractor columns" or tractor stations and the supply of other mechanical equipment. The employment of tractors necessarily involves the breaking down of barriers and cultivation in common of relatively large areas, and the advantages are so obvious that the visit of a tractor column or the establishment of a tractor base is almost inevitably followed by the formation of Collectives in the surrounding area.

The tractors and other means of production used by the tractor stations are as a rule provided for by existing Soviet farms, by Unions of Collectives, or by initial payments from the peasant farms or agricultural co-operatives

on a share basis ; and a certain percentage of each year's harvest is automatically set aside to provide a fund for the renewal of tractors and purchase of other agricultural machinery. The first of the machine and tractor stations was set up in 1928, near Odessa. This station made agreements with the surrounding farms to carry out all their productive processes, including thrashing and transport, and soon passed to the stage of beginning to organise the farms into a Collective. Every agreement with a tractor station to carry out productive processes also provides for the formation of a Collective ; most of the agreements are for a term of years, covering sowing and all other operations and services, in particular the provision of selected seed, consultation with agricultural experts as to the best crops to grow in those districts, and the provision by the Collective of the labour required. The station takes a percentage of the crop in return for its work, the balance being used by the peasants or put on the market through the co-operative organisations. Further points in the agreement with the tractor station are that boundary-strips and all other landmarks shall be obliterated, to facilitate the working of the tractors ; and that the individual peasant households shall get a percentage of the crop, based on the area of land put into the Collective. Provision is made for the rotation of crops where that has not been practised ; and the peasants are taught how to use the tractors and other modern agricultural machinery. The following is an example of the agreements made between the Shevchenko Machine and Tractor Station (which was set up by the Ukraine Union of Soviet Farms) and the surrounding villages :

“ We the undersigned representatives of 238 citizens of the village of Balaichuk, Odessa district, acting on the authority given us by the attached powers of attorney, and

hereinafter described as 'the peasants,' on the one part—and the Vice-Chairman of the Ukraine Union of Soviet Farms, hereinafter referred to as 'the U.U.S.F.' on the other part—with the aim of re-organising the small individual peasant farms into a single large collective farm worked with the best possible technical equipment, have concluded the following agreement :

“(1) The peasants undertake to combine the whole of their fields, of an area of approximately 7,000 acres, into a single territorial unit suitable for collective working by tractors ; all boundary marks distinguishing the separate land holdings of the individual peasants are to be obliterated.

“(2) The rotation of crops is to be agreed between representatives of the peasants and of the U.U.S.F.

“(3) The U.U.S.F. undertakes to organise and put at the service of the peasants a tractor section with all auxiliary equipment required, to carry out the work connected with the rotation of crops agreed upon, namely, ploughing, preparing the soil, harrowing, sowing, reaping, transport of sheaves to the thrashing machine and thrashing. The whole of this work is to be carried out by the peasants under the direction of an agronomist and an engineer appointed by the U.U.S.F. whose instructions must be exactly and faithfully followed by the peasants.

“(4) The whole of the necessary work, without exception, and including work on the tractors, must be carried out at the proper times by the peasants themselves, who are not entitled to hire outside labour. The work must be carried out punctually and with due diligence as required by the agronomist and engineer ; the U.U.S.F. undertakes to train the peasants for all

tractor work and to keep the implements and machines in good condition.

“ *Note.*—The method of organising labour is to be fixed by a separate mutual agreement.

“(5) The U.U.S.F. undertakes to defray all costs connected with the organisation of production, amortisation and maintenance of agricultural equipment, the supply of fuel and lubricating oil for the tractors, and also the salaries of the technical supervisors.

“(6) Pure sorted seed supplied by the U.U.S.F. from its seed farms is to be used for sowing.

“(7) In the event of failure by the peasants to produce the labour required or of their work being unsatisfactory, the U.U.S.F. has the right to sue the peasants for losses sustained and to terminate the agreement.

“(8) Land under fodder crops in accordance with the rotation of crops agreed upon is worked collectively only to the extent of being ploughed by tractor and sown with pure sorted seeds. After being sown, such land is divided among the peasant households, and all further work of looking after the crop and collecting it is carried out by each household for the lot assigned to it.

“(9) In payment for all expenditure covered by paragraph 5, the U.U.S.F. receives a fourth part of the winter wheat and a third part of all other winter and spring crops (excluding hay), after thrashing. The cost of seed is divided in proportion to the part of the harvest received by each party to the agreement.

“(10) For ploughing and sowing land for fodder crops, carried out by means of tractors in accordance with paragraph 8, the U.U.S.F. receives a money payment on the basis of a separate agreement with the peasants, and has no share in the harvest.

“(11) The part of the grain harvest which belongs to

the peasants, and also the whole of the straw, is divided among the peasant households in proportion to the land shares belonging to each (i.e. the acreage put into the pool by each household on the formation of the Collective).

“(12) The present agreement is concluded for five agricultural years—i.e. until October 1st, 1933.

“(13) One year prior to the expiration of the agreement, i.e. not later than October 1st, 1932, the parties must decide the question of further extending the agreement. If no agreement has been reached by that date, the U.U.S.F. is not required to plough fallow land or sow winter crops in 1933.

“(14) Each peasant household has the right to withdraw from the agreement at any time during its currency ; but in such cases the household must give the U.U.S.F. a year's notice of its proposed withdrawal, and the U.U.S.F. is not bound to plough fallow and sow winter crops for households which are proposing to withdraw, in the year of their actual withdrawal.

“(15) The land shares of any household withdrawing from the agreement in accordance with paragraph 14 are returned when the rotation of crops is terminated in each field. The shares in fallow land are given in the spring, and in other fields after the in-gathering of harvest.

“(16) If 50 per cent. of the total number of households withdraw from the agreement before its expiration, the U.U.S.F. has the right to terminate the agreement after giving one year's notice to the peasants ; in the final year fallow land is not ploughed and winter crops are not sown by the U.U.S.F.

“(17) The village as a whole, as well as individual households, has the right to withdraw from the agreement before its expiry, subject to a year's notice.

“(18) In the event of the agreement being terminated all buildings erected by the U.U.S.F., as well as all equipment bought by it, remain its property, and it has the right to remove them or lease or sell them.

“(19) If during the currency of this agreement or on its expiration the peasants desire to take over, for collective use, the tractor section with all requisite implements, with a view to carrying on their farms on a collective basis, the U.U.S.F. undertakes to hand over what is required to whatever form of collective organisation is set up, on conditions and at prices mutually agreed.

“(20) The U.U.S.F. undertakes to give organisational and technical aid to the peasants with a view to establishing new collective agricultural undertakings (group gardening, group vineyards, dairy farms, collective market-gardening, etc.), on the basis of a special agreement in each case.”

The reports of the Shevchenko Machine and Tractor Station give interesting details of the methods of organisation and the results obtained. On the conclusion of an agreement with the peasants in each village the important points which have to be settled are : (1) the exact degree of collectivisation ; (2) the rotation of crops on the collectivised area ; (3) the organisation of labour ; (4) the distribution of the product ; (5) the management of the Collective, and its participation in the management of the central Station ; (6) the extension of collective working. Points connected with the initial degree of collectivisation have already been discussed, and the rotation of crops is a purely technical question ; but the organisation of labour requires some explanation. In the first place, it is a fundamental principle of organisation that the labour is to be

provided by the peasants themselves ; the central Station provides only two technical directors—an agricultural expert, to give guidance in the use of particular crops and methods, etc., and an engineer, to supervise the handling and repair of tractors and other mechanical equipment. The general work in the fields is planned out by the agricultural expert, in consultation with the management committee of the Collective ; the quantity and kinds of labour required are listed, and the scale of wages for each job is agreed upon. The purpose of the wages scale is to find a common factor for the various forms of labour required, which vary greatly in skill and intensity. On the basis of existing custom, each form of labour is given a money equivalent per hour or job, and the total volume of labour required is then arrived at, expressed in money. The next question is the distribution of this labour among the members of the Collective. The method recommended by the Shevchenko Station, and adopted by the village Collectives for which it works, is to distribute the labour in the same proportion as the products of the labour will be distributed. The distribution of the products is on the basis of the "land shares" contributed by each household ; i.e. the acreage formerly worked separately and now put into the pool by each peasant household. In a village Collective working, say, a thousand acres collectively, twenty households may have contributed 20 acres each, and another sixty households 10 acres each. In the distribution of labour, each of the twenty households has to provide labour equivalent to 2 per cent. of the total wages bill, and each of the sixty households has to provide 1 per cent. A rota is then prepared by the management committee on the basis of which each household actually works from day to day ; in the preparation of the rota the management committee takes into account

the age, sex and skill of the available members of each household. Adjustments may be made from time to time on the basis of additional work found to be necessary, or illness or absence of particular individuals ; but the general proportions are maintained. In the event of any household without any adequate reason failing to carry out the work assigned to it, this is reported to the general meeting and may result in a "fine," which actually takes the form of a reduction in the share of products or money allotted to that household at the end of the harvest.

In the case of the labour required for the tractors, it is obviously impossible to divide this among unskilled peasants. The Station therefore asks each village to nominate three young peasants for each tractor that will be employed in the village Collective, and gives them a special course of training. When they are qualified, they return to the village and actually drive the tractors during the season, under the general supervision of the engineer provided by the Station. This labour is priced in the same way as other labour, and credited to the household from which the tractor driver is drawn ; but as the total value of each driver's labour is often greater than the value of labour to be provided by the household under the general plan, the balance is actually paid in wages, and the amount paid in money is levied on the peasants in general, in the same proportion as other distributions, i.e. on the basis of their "land shares."

The usual distribution of the products of labour on the collectivised land has already been indicated. After deducting the percentage of grain due to the Station for its share in the work, the balance of the grain and all the straw are divided among the peasant households in proportion to their individual contribution to the land pool. This principle was adopted because it was roughly

in conformity with the previous distribution of grain, and was desired by most of the peasants ; it stabilises the relative economic position of the various households ; but in this connection it must be noted that, on the one hand, the *kulaks*, or rich peasants, are absolutely excluded from the Collectives ; and, on the other hand, the poor peasants, whose main difficulty was the lack of working horses and other means of production, are in a considerably better position on a Collective. Distribution on the basis of land shares, however, is only applied in the elementary Collectives ; in the Artels it is usually based on work done.

The question of the management of the Collective itself does not raise any serious difficulties. When it is formed, there are already a certain number of peasants who know the general working of a Collective (from visits to other Collectives or Soviet farms) and are able to take the lead in organisation. The general meeting which decides to form the Collective naturally elects these or other experienced members to the management committee, and the Station sends an organiser to help in the initial work, planning out the distribution of labour, etc. In the current work of controlling the labour actually done the committee has strong support from the general mass of peasants against any delinquents, and there is always the general meeting to fall back upon if any serious difficulties arise. In fact, general meetings are frequently held, for the purpose of reporting the conclusion of each stage of work, discussing adjustments in the labour rota, and hearing reports from other Collectives or from the Station. Thus the management committee is in constant touch with the members, and every peasant in the Collective is in touch with all developments. A feeling of joint responsibility rapidly takes the place of the traditional

individualistic outlook of the peasants, and their actual technical knowledge is widened so that they appreciate the advantages of large-scale farming even before the first harvest after collectivisation shows an increase of some 50 per cent. over the previous individual harvests.

The question of the participation by the peasants in the management of the Machine and Tractor Station itself has not been fully worked out. A Soviet of delegates from the villages served by the Station meets regularly at the Station to hear reports and discuss matters of general interest—such as the establishment of a central butter factory—but at present the manager of the Station holds office from the Union of Soviet Farms and not from any Soviet or executive committee of the Collective farms. It is felt that the management of the Station cannot at present be left to the control of the peasants, simply because of their inexperience and the fact that only weak connections exist between the various village Collectives served by the Station. Moreover, the questions of what radius the Station is to serve, how additional tractors are to be obtained if new villages are brought in, and what relations are to exist with other Stations and organisations, are questions which at the present stage at least can only be settled by a central authority, responsible for planning the general work of machine and tractor stations throughout the country. For this reason the delegates from the various Collectives are brought to the Station only in a consultative capacity ; but many of them are being trained in the work of various departments, and it is the intention eventually to hand over to them the whole work of the Station.

An important question to be settled before that position is reached is the merging of the various village Collectives.

The working of each village as a single Collective instead of as a number of separate farms is an immense step forward ; but within the total area (about 120,000 acres) served by the Station the land of the separate Collectives varies from 12,000 acres to 1,000. Merging is at present impossible, owing to the lack of common feeling and the difficulties which would arise in the organisation of labour supply and management ; but clearly the smaller Collectives cannot be run to the best advantage. From the technical standpoint, the whole area served by the Station could best be run as a single unit, on the lines of the great Soviet farms. But it will be a long time before that is possible, and in the meantime all that can be done is to persuade some of the smaller Collectives to join up with each other or with larger ones in adjoining areas.

In other ways, however, the separate villages are being drawn together by the work of the consultative Soviet referred to above, and by the setting up of joint factories for working up products. Within each Collective, too, the members are being drawn closer together, in many cases entirely on their own initiative, for purposes not included in the original statutes—joint market gardening, dairy farming, etc. The process of breaking down barriers, which began with the obliteration of boundary marks between the individual fields, is rapidly going ahead, and the immediate economic results obtained are a guarantee that the process will continue.

The central organisation of the Collective farms (as distinct from sales co-operatives) throughout the Soviet Union is the All-Union Council of Collective Farms. There are also "Centres" in the separate Republics ; in the R.S.F.S.R. and the Ukraine there is a network of regional and district unions of Collective farms. The work

of the Centres for Collective farms in each Republic is somewhat similar to that of the Chief Committees in the early days of the Supreme Economic Council—the preliminary organisation of industry. In the case of the Centres for Collective farms the problem to be solved is the unification of the immense mass and variety of individual peasant farms. In the first place, individual peasant farms have to be transformed into Collectives, if only in the common working of arable land ; and secondly, the Collective farms have to be guided through their initial stages, and to be linked up with each other in district and provincial associations. The main work of the Centres is to control the actual formation of Collectives, to see that they are properly organised and that the lines of organisation really ensure the general aims of Collective farming. This involves the maintenance of a body of organisers and agricultural experts, who examine the position of each Collective farm and advise the management committees of the Collectives. There is, of course, no interference in the administration or work of the Collective farms by the Centres, whose function is to educate and encourage the peasants in Collective methods. The Collective farms are completely independent, and their district and regional associations are purely consultative bodies.

Every effort is made to draw the Collective farms into the co-operative network for the sale of their products. In a very large number of cases the Collective farms have developed from “ agricultural co-operatives ” of a more limited scope—for the co-operative purchase of seed or disposal of produce ; and in such cases the link with the co-operative organisation is already established. But this also does not mean any administrative interference—the co-operatives buy and sell for the Collective farms, but the latter maintain their own identity and their financial

and administrative independence. In the case of Collectives served by machine and tractor stations there is always a clause in the agreement by which the Collective is bound to sell its marketable surplus through the Co-operatives.

It is clear, however, that the Centres for Collective farms actually exercise considerable influence over the individual Collective farms, by means of suggesting forms of organisation, methods of working, the most advantageous crops, and so on. The Centres, therefore, are not merely institutions for propagating the idea of Collective farming, but are playing a considerable part in the organisation of agriculture as a whole. They are, in fact, the first step towards the general organisation on a planned and rationalised basis of agricultural production, and their functions may well develop, with the general collectivisation of peasant farming, until they become the central administrative apparatus of Collective farms, just as the Soviet Farm Trusts and Combines control the various State-owned farms.

The regional and district associations of Collective farms are purely consultative bodies ; but in certain cases there have developed specially-formed associations of Collective farms which carry the productive organisation a stage further. These Associations are formed jointly by a number of Collective farms in order to make it possible to develop certain activities which the separate Collectives were unable to undertake. The most general object of these associations is the establishment of a "tractor base," to serve the needs of the various collectives forming the association. But there are examples of many other kinds of joint activity—the establishment of bacon, butter and cheese factories, of seed-testing stations, stud farms, etc. These associations pave the way to the unification of the

smaller collectives in larger units, in order that the best economic results may be obtained from the use of modern agricultural methods. The development of factories is also of considerable importance in providing an outlet for the labour set free by modern methods of agriculture, and in this way raising the total volume of production in the villages.

Most of the associations already formed are limited to one or two specific purposes ; but there is a tendency to widen the objects, and in fact to make the associations carry out all the productive activities of the Collective farms by which they are formed, apart from the actual cultivation of the ground. Their work on the productive side is somewhat analogous to the work of the Co-operative organisations on the distributive side. Many of the agricultural co-operatives, beginning with the sale of products for a village or group of peasant farms, have also developed factories for working up the products ; the difference between such agricultural co-operatives and the Associations of Collective Farms is that the latter are based on a higher form of agriculture—collective instead of individual—and they are therefore developing more rapidly.

By 1930 40 per cent. of the total number of peasant farms had entered into some form of collective organisation, and the movement into the Collectives is gathering pace. Moreover, the simpler forms of Collective—for joint tillage or other limited object—are being constantly converted into the higher form of artels, which involve the collectivisation not only of land and labour, but also of agricultural equipment, working cattle and buildings used for agricultural purpose—in the artel only houses and gardens and some livestock remain privately owned.

As in the early stages the lack of capital held up the

growth of collectivisation, so now the development is almost entirely conditioned by the extent to which agricultural machinery can be supplied. Large numbers of tractors and other machines have been imported ; existing agricultural machinery factories in the Soviet Union have been extended, and enormous new factories are being constructed. All of this is organised by the Agricultural Machinery Combine, which is an industrial unit under the Supreme Economic Council. But the actual work of bringing these tractors and machines to the knowledge of the villages is now organised by a special joint body of the Commissariat for Agriculture and the Co-operative organisations—"Tractorcentre"—whose work is to organise, in the most important areas, special depots equipped with tractors and other agricultural machines, according to the nature of the farming in each area. Tractorcentre had established over 200 of these depots by the summer of 1930 ; and other depots and "tractor columns" are being organised by the Co-operative Societies. The tractor column, consisting only of tractors, introduces only collective tillage, the most rudimentary form of joint organisation ; but the tractor and machine stations are designed to carry out much wider measures of collective working.

But the rush of the peasantry towards collective working has been so great that the supply of tractors and the larger agricultural machines has not been able to keep up with it. It has therefore been necessary to organise "machine and horse" depots—an elementary form of the "machine and tractor" stations—in the areas not touched by the tractors ; in 1930 there were about seven thousand of these machine and horse stations. These are being organised and run by the Co-operative Societies.

Mention must also be made of the direct work of bodies of town workers voluntarily enlisted to go into the villages and give the peasants the ideas of organisation with which the industrial workers are familiar. This is done systematically on a large scale, either by "shock tactics" such as the special enrolment of 25,000 town workers in the spring of 1930 to help in organising the spring sowing, or by the constant permeation of "patronage." Patronage in this sense means the adoption by a particular factory of a village or agricultural Collective. The factory committee organises regular visits of experienced workers to the village, where they not only carry out general propaganda for collective working, but also actually build up the organisation, helping the committee in its work, training the peasants in the use of machines, setting up factories for agricultural produce, and generally encouraging and giving practical help to the peasants.

But the most practical form of encouragement is undoubtedly the establishment of machine and tractor stations, which can offer the villages the benefits of modern large-scale agriculture in return for a percentage of the harvest. Such a station is not merely a propaganda office ; it is a part of the future organisation of agriculture, and is preparing the way for the total abolition of individual farming and its organisation throughout Russia in a series of large-scale units.

With some 40 per cent. of the peasant households now organised in Collectives and selling their surplus production through the Co-operative Unions, and in addition the Soviet farms producing some three million tons of marketable grain, the work of organising agriculture into relatively large units has already achieved substantial successes. It is now possible to plan the development of agriculture, and at the same time to co-ordinate this plan

with the plans of other industries—especially the agricultural machine industry. For the first time it is possible to get accurate statistics of production on a large enough scale to be representative. For the first time the co-operative organisations are able to be sure of handling grain and other products from the surplus of about ten million peasant households. It is an immense step forward in agriculture, and it is the means by which surplus agricultural production can be secured for the towns.

At the same time, most of the Collectives are not large enough for satisfactory working, and many of them have not yet secured tractors ; moreover, they are limited in scope—the collectivisation does not cover all means of production or all labour. Therefore the immediate results of collectivisation must not be over-estimated. The process is necessarily a long one, and until it is completed agriculture cannot be fully organised. There are Soviet farms, there are various forms of Collective, and there are also the individual peasant farms which have not yet been brought into collective working. With these as the basic units, there are Associations of Collectives, and Machine and Tractor Stations, or Horse and Machine Stations, uniting a small number of the Collectives in higher operative units ; and the State farms are grouped together in the various Combines, according to the work on which they specialise—grain production, stock-rearing, etc. Alongside of these there are also various forms of Co-operative organisation, handling sales and purchases for the Collectives or for village co-operatives of a selling as distinct from a producing type. At the top there are the Union of Collective Farms and the Centres for Collective farms in the various Republics ; with the Commissariat for Agriculture as a general supervising body. The chief unit which, though outside the agricultural organisation, is essential

to the growth of organisation in agriculture is the Agricultural Machinery Combine (under the Supreme Economic Council) ; while the banks and a number of Credit Societies, mainly co-operative, are making it easier for the collectivisation to be developed.

The organisation of credit is closely bound up with the extension of the sown area in general, and especially of the sown area for industrial crops, such as cotton and flax. The loans often take the form of " seed loans "—lent from the State reserves for repayment in kind after the next harvest. Apart from these repayments in kind, the credit organisation also helps to bring in produce to the co-operative machinery as opposed to the private merchants, the terms of the loan providing for repayment in produce at stipulated prices. Of even greater importance in the collection of marketable grain is the system of contracts, by which the individual peasants or Collectives undertake in advance to sell definite quantities of produce to the Co-operative organisations, at fixed prices. For each harvest a general plan of " contracting " is prepared, for each district separately, and the appropriate co-operative organisation sets to work, on the basis of this plan, to make contracts with individual peasants or Collectives for the purchase of their surplus products, offering in return some form of goods required by the peasants, either immediately (on credit) or after the harvest in exchange for the produce.

With the reorganisation in 1930, the Trade Commissariat of the Soviet Union is responsible for supervising and controlling the collection, storing, working up and distribution of all food products. In the case of special products, such as milk, new organisations have been created under the Trade Commissariat, to co-ordinate the supplies to industrial areas and generally to develop sales.

The Milk Combine takes over from the milk or general agricultural co-operatives the supplies of milk which they actually collect. The work of these co-operatives is to organise milk supplies, to encourage the production of milk, and to help forward the collectivisation of milk production on modern methods—central cow-sheds, proper feeding, etc. The work of the Milk Combine is to take over the milk, organise its transport and sale, and the preparation and sale of butter, dried milk and other products. In this connection it has to build and equip the necessary works, and for this purpose it has set up a special subsidiary. Apart from its current operative work, the Milk Combine has to prepare plans both for sales and supplies.

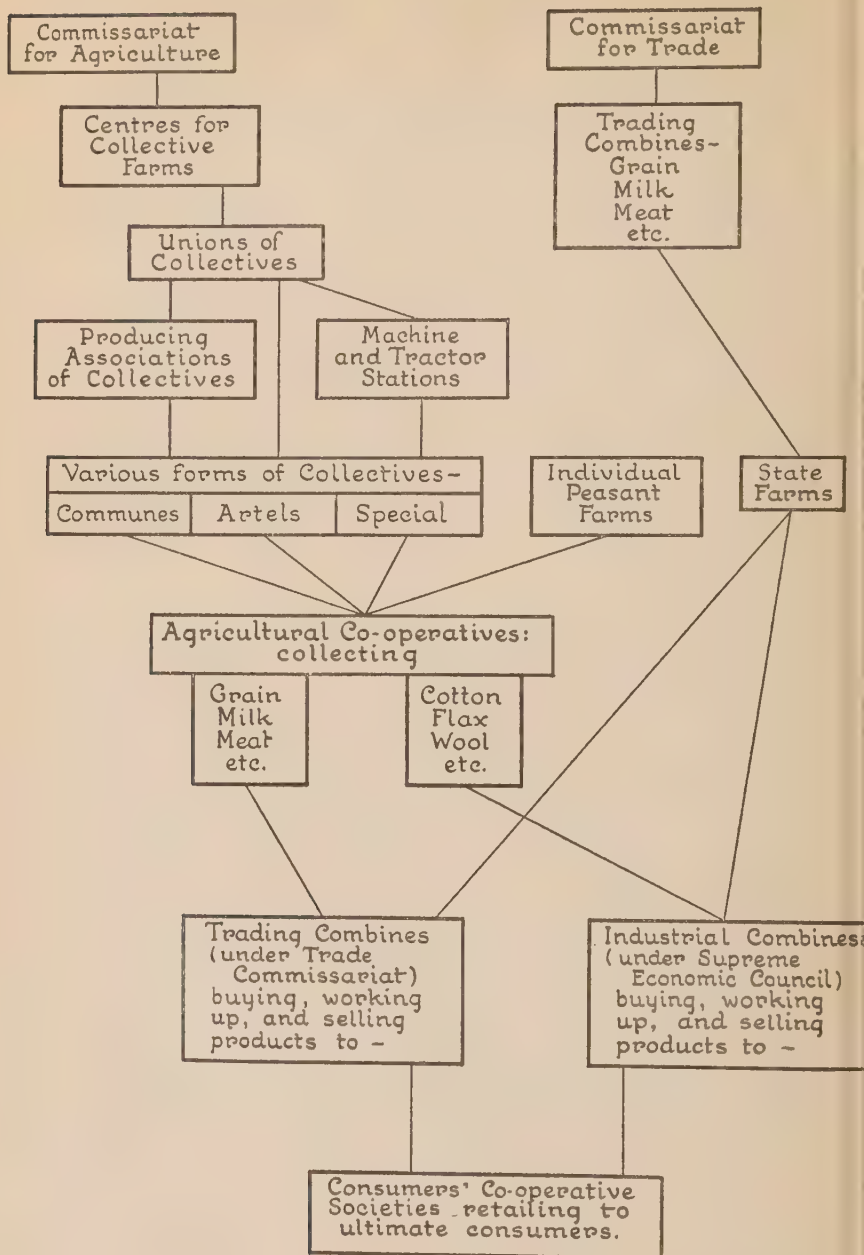
The former Sugar Trust (under the Supreme Economic Council) has also been reorganised as the Sugar Combine and handed over to the Commissariat for Trade. The same procedure has been followed for the Meat, Food, Fishing, Tobacco and similar industries—in fact for all those in which production is still more or less scattered and largely in the hands of individual producers, while the collection of any marketable surplus depends to a great extent on the co-operatives. In most cases, however, there are industrial processes involved in working up the produce for the market, and the factories or works concerned are in the appropriate Combine under the Commissariat for Trade, which has therefore become to this extent an industrial Commissariat parallel with the Supreme Economic Council. The Commissariat for Trade is also concerned with the wholesale purchase and sale of grain. The aim of the new organisation introduced in 1930 is to establish a clear line of demarcation between the previously existing organisations handling grain, and to set up a directing centre, the Grain Combine, under the

Commissariat for Trade, not as a bureaucratic department, but as an operating concern—working on much the same lines as the Combines in industry work under the Supreme Economic Council. In the first place, all operations involved in the collection of grain from the peasants or Collectives are taken over by the network of grain co-operative organisations, headed by the “Grain Centre,” the central Union of Grain Co-operatives. All grain collected by the grain co-operatives is handed over to the Grain Combine, under an agreement which guarantees to the co-operatives all their expenses plus a commission. The Grain Combine is the wholesale distributing organisation ; it receives the grain collected by the co-operatives, stores it, mills it, and sells it to the Consumers’ Co-operatives, who alone are engaged in retail sale. The grain output of Soviet farms, as distinct from Collectives, does not pass through the co-operatives, but is sold direct to the Grain Combine.

In the case of districts which produce only a small quantity of surplus grain, especially the industrial areas around Leningrad and Moscow, and the wooded areas of the north, grain co-operatives do not exist, and the collection of such surplus grain as is produced is left to the ordinary consumers’ co-operatives, headed by Centrosoyus. The grain is handed over by the consumers’ co-operatives to the Grain Combine, which is the sole wholesale distributor of grain.

The effective collection of surplus grain from the peasants and its distribution to the non-peasant consumers must largely depend on the extension of the Soviet farms and Collective farms, which will immensely simplify the process of collection as well as increase the quantity of grain available for the towns. With a comprehensive system of large-scale agricultural units, the surplus grain

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and other agricultural products from every area could be estimated and brought into the general plan, while the organisation of these units could be simplified and brought into relation with the general organisation of industry. Until these large agricultural units are sufficiently developed the organisation of agriculture is necessarily two-fold : as shown in the diagram on page 220, the system of individual peasant production, gradually changing into collective production, is under the general guidance of the Commissariat for Agriculture ; while the system of State farms, working on definite programmes of supply and production on the same lines as State enterprises in other industries, is organised in specialised Combines under the Commissariat for Trade.

CHAPTER XIII

GENERAL ECONOMIC PROBLEMS

IN the general organisation of production and distribution a number of questions arise which cannot be settled on the basis of each industry taken as a separate unit. These questions are not merely problems of co-ordination in a purely economic sense, such as the parallel development of industries which are directly dependent on each other. If it is decided to develop the metallurgical industry, for example, it is obviously necessary also to develop the coal- and ore-mining industries, and probably the railway traffic facilities must be extended. These are quite obvious and secondary problems ; their solution requires foresight and careful planning, but they do not raise fundamental issues. The really fundamental issues arise in the making of the plan, in the decision, for example, whether or not to develop the metallurgical industry, from which the development of the auxiliary industries follows as an unavoidable necessity not desired for its own sake. The purpose of this chapter is to state these fundamental issues and to examine why the make-up of the general plan is what it is. To some extent, the issues are purely " political " or " social." The guiding purpose in the operation of the whole scheme is the improvement of the material and social conditions of the people of Russia, of the peasants as well as of the town workers ; and the method adopted is the socialist as opposed to the capitalist system of production. In the period

of transition from the capitalist system to the socialist system, issues arise which are properly described as political—the question of the rate of change from capitalism to socialism, and the methods adopted to effect the change (such as the direct expropriation or penalising taxation of the surviving capitalist elements ; the encouragement by preferential taxation or the provision of credits for the socialist elements). These are the most fundamental issues in the economic policy of the Soviet Union, and they are the constant subject of discussion in the Press and among the people of Russia, and particularly in the Communist Party. But any discussion of these issues lies outside the scope of this book.

The problems with which this chapter is concerned are those which, though fundamental and “social,” are not “political” in the strict sense ; they arise with equal insistence at every stage of the transition period from capitalism to socialism, and they will still be present (though possibly in altered forms) even in a completely socialist system. The first question is the relation between production for consumption and production not consumed in a single year, but put aside either as reserves or in the form of buildings and machinery, etc., with which production can be expanded in future years. Another question intimately connected with the first, but involving special points of its own, is the level of wages and the general conditions of labour which the plan of production has to provide. Then there is the question of providing for “services” which, though they may be connected with production, are not directly productive—education and health and similar services, and also art and literature and “abstract” sciences, as well as research with definite economic aims. And finally, so long as goods are bought and sold, there is the question of prices. In the preparation

of each year's plan of production and distribution decisions on these questions have to be taken at the outset, and the actual details of the plan are merely the application of these decisions to the appropriate productive units.

Decisions on all these questions are dependent on the technical level of production throughout the Soviet Union. In agriculture, for example, the former technical level on all peasant farms was extremely low, not only in comparison with other countries, but also in the absolute sense—the product of each person's labour, on the average, was little more than enough to meet the bare physical needs of himself and his dependants. Such surplus as was drawn from the countryside to meet the need of agricultural products in the towns was mainly taken at the cost of keeping large numbers of the peasants almost below subsistence level. In most of the town industries the position was much the same ; although there were some large and well-equipped works, many articles of general use were produced in small workshops with primitive equipment. Taking the country as a whole, the technical level was exceedingly low ; and this fact has to be taken into account in determining the plan of how much of each year's production must be consumed and how much can be “ accumulated ” in order to raise the technical level and expand production in future years.

The general principle adopted is that the volume of products consumed must increase year by year, so far as each town worker is concerned, by approximately 10 per cent. : in other words, that real wages must increase on the average 10 per cent. each year. So far as the agricultural population is concerned, the improvement in material conditions is not provided for in a general form such as is possible for the town workers ; it is made dependent, broadly speaking, on improved methods of

cultivation, and on the political policy of discouraging the *kulaks* or peasants who employ hired labour, and encouraging the poorer peasants. The policy of improving conditions year by year, so far as the peasants are concerned, therefore finds expression in making available to them the machinery and technical help which in fact gives the peasants who join Collective farms steadily improving conditions, because the productivity of their labour is immensely increased. At the same time, the volume of "non-productive" services is also increased year by year.

Every actual surplus of production, after allowing for these increases in consumption, is put aside for "Socialist accumulation," to improve technique and expand the volume of production. In practice, the accumulation is increasing each year, because the increase in production is between 20 and 30 per cent., while the increase in consumption is only some 10 per cent. ; and the increase in production is itself made possible by the planned use of the accumulation to raise the level of technique both in industry and agriculture, and to build and equip new factories—including the "grain factories" or new Soviet farms.

The actual sources of "Socialist accumulation"—accumulation in the hands of the State—are the surpluses of State industries, trade, insurance and banking (including temporary surpluses) and the surplus raised by taxation over and above current administrative expenditure. In addition, there is the individual accumulation which is available to the State through State loans ; there is the co-operative accumulation, which is used for co-operative expansion on lines taken into account in the State plan ; and to a limited extent the State can use credits received from abroad for the expansion of pro-

duction. Each of these sources has to be taken into account in estimating the total available each year for the purpose of expanding production.

So far as State industry is concerned, the basis for the estimate is provided by each of the Combines or other organisations. On the average, as already indicated in the chapter on Trusts, 50 per cent. of the surplus comes to the State Treasury ; 10 per cent. is invested in the Bank for Long Term Credits to Industry. Both of these allocations are mobilised, in different ways, for use wherever they are needed ; the balance of 40 per cent. remains in the hands of the particular organisation, for the expansion of its own individual production—or, now that industrial Combines have taken the place of separate Trusts, for the expansion of production in a branch of industry taken as a whole. The plan of expansion in each industry is included in the general plan of expansion, and has to be sanctioned by the higher economic authorities ; but a definite proportion of the surplus is in all cases left for the particular industry concerned, which ensures a steady and automatic all-round development apart from specially concentrated developments in industries which it is necessary to develop in spite of the fact that their own surplus may not be enough for this purpose.

The State Budget includes receipts from State industry (including transport, posts, etc.) and from taxation, as well as from State loans. Apart from its use as a means of meeting the cost of social services, defence and general administration, the State Budget serves to mobilise a part of the surplus of all industries for use in the development of special industries. For example, the plan for the financial year to September 30th, 1930, provided for Budget grants to develop electrification amounting to

£31,000,000 ; to develop other industries, £179,000,000 ; agriculture and irrigation, £72,000,000.

The co-operative accumulation is built up of undivided trading surpluses and also of undivided producing surpluses—including the percentage set aside each year as the “indivisible fund” of agricultural Collectives. Generally speaking co-operative accumulation is used by the various societies or Collectives for their own development—new buildings, additional stock—or, in the case of agricultural co-operatives and Collectives, agricultural machinery or equipment. But a certain part of the co-operative surplus is mobilised for wider purposes through the Co-operative Bank and credit societies. Apart from the co-operative credit institutions, the banks in general—and in particular the Bank for Long Term Credits to Industry—mobilise surpluses and make them available for financing the growth of production.

In addition to State and Co-operative accumulation for expansion, there is also a certain amount of accumulation by private capitalists or by individual peasants. By taxation in various forms, by State loans, and by other credit operations a part of this accumulation is mobilised for use in State industry ; the balance is used chiefly as trading capital, as there is very little opportunity of investment in privately-owned industrial concerns.

Apart from the estimated volume of accumulation in the hands of the State, which indicates the total possible expansion, decisions have to be taken on the allocation of the total. Ultimately the allocation has to be made in the greatest detail, involving particular factories, machinery, mines, railway lines, etc. But the detailed distribution is almost a technical matter : the general point of principle which has to be settled is the proportion of expansion required in each of four main divisions :

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1. Industries producing means of production and raw materials.
2. Industries producing articles of consumption.
3. Transport.
4. Agriculture.

A certain expansion of the industries producing articles of consumption is, in any case, necessary to provide the improvement in the conditions of the workers (and sections of the peasantry whose output is increased) allowed for in each year's plan. Increasing wages bring an increasing demand for articles of consumption. At the present time—and until the total agricultural output is substantially increased—the increased demand from the town workers must be chiefly for agricultural produce (grain, meat, butter, etc.). But there is also an increasing demand for articles of consumption produced by manufacturing industries—clothing and other personal and household requisites; moreover, the securing of larger quantities of agricultural produce for the towns is itself to some extent dependent on supplying the villages with the products of town industries. Some of the goods required by the peasants in exchange for their produce are in the class of “means of production”—tractors, ploughs, milk-separators, etc.—but they also require articles of consumption (such as cloth and household requisites). Thus the plan of expansion for each year must provide a certain percentage increase in the town industries producing articles of consumption, and this increase must be related to the increased demand anticipated from the greater total of wages and the greater volume of products exchanged with the peasantry. Of a similar character, although in a different form, is the expansion of non-productive social

services, including especially the provision of new dwelling-houses ; the annual plan has to provide an allocation for these, on the basis of the percentage increase which is considered necessary from year to year.

When the necessary allocation has been made for developing the industries producing articles of consumption (including articles required for expanded social services), the allocation for developing agriculture has to be considered. Reference has already been made to the need to raise the technical level of agriculture ; in concrete terms, this means the provision of tractors and other machinery, apart from measures of reorganisation which do not require new means of production—such measures as the abolition of boundary strips, the use of sorted seeds and the rotation of crops. The allocation for developing the supply of tractors and other agricultural machinery, as well as the necessary buildings, the extension of stud farms, etc., is determined primarily by the anticipated use to which these can be put : in general terms, by the anticipated extension of Collective or State farming, which requires these means of production.

The allocation for agriculture from the total available accumulation has also to cover certain items which are in a sense capital outlays to extend production, but which have special importance as a form of insurance. The most important of these measures is the creation and enlargement of reserves of seed grain to meet possible failures of crops due to weather conditions. The Volga region famine of 1921 was due to an intense drought, but its effects were particularly far-reaching owing to the fact that there were no reserves of grain after the long period of civil war, and it was impossible to provide enough seed for the 1922 sowings. Since then there has been an annual allocation (through the Budget assignment for the Commissariat of

Agriculture) for the building up of seed reserves of grain and other crops. The allocation for irrigation (£11,000,000 in 1929-30) serves a similar purpose—it is partly for the direct expansion of production and partly for insurance against drought in certain areas.

The allocation to provide for development of industries producing the means of production and raw materials is primarily dependent on the two main allocations already mentioned—for industries producing consumption articles and for agriculture. An allocation for more tractors in agriculture—primarily required to increase the supply of bread for the town workers—determines an allocation for the building of new tractor-constructing factories. It involves also capital development in the mining and metallurgical industries, and in the oil industry to provide the motive power for the tractors when they come into operation. In the same way, an allocation for capital development in the textile industry requires a corresponding allocation to develop the textile machinery industry. The allocation for development of the industries producing means of production and raw materials is therefore primarily the logical consequence of allocations for the development of other branches of industry, including agriculture and transport.

But there are two special factors which have to be taken into consideration. The first is the question of the foreign trade balance. If it is decided to make an allocation for providing more tractors for agriculture, it is still an open question whether the number required in excess of what the Soviet Union can at the time produce is to be imported from abroad or is to be provided by developing new tractor-construction factories within the Soviet Union. The decision on this question depends to a great extent on the total accumulation available. In the early period

of the Revolution, and in fact up to 1928, the available surplus was not enough to make possible the development of tractor production, after making allocations for still more urgently needed expansions. Therefore the tractors required were imported, chiefly from the United States. But now that the available accumulation is much greater, the building of tractor-construction factories has begun. The position with textile machinery requirements was similar : for many years they were imported from England, but the increased accumulation has now made it possible to build textile machinery factories in the Soviet Union, which will meet a part of the requirements.

The question of importing from abroad the capital goods required for the expansion of industries is closely bound up with the question of goods available for export, which in effect are exchanged for the imported goods. Thus any expansion of imports requires an expansion of exports, and the latter almost inevitably requires further capital outlay in the exporting industries. The expanding export of oil, for example, requires the sinking of new wells, the provision of new pipe-lines, the enlargement of refineries, provision of cracking plants, etc. The plan for the allocation of the total available surplus has to take the balance of foreign trade into account, both positively and negatively : it must provide new capital for the exporting industries, but the amount required for this purpose can be reduced in so far as allocations can be made to build up new industries in the Soviet Union, to provide goods formerly imported. In each case decisions on this point have to be made, and there is a steady tendency to develop new industries in Russia in order to avoid the need to import the corresponding articles from abroad. At the same time, this does not mean an attempt to abolish foreign trade altogether. There are certain articles

—as, for example, tea—which the Soviet Union will always have to import. But articles which can be produced in any industrialised country tend more and more to be provided by Soviet industry, although the requirements are so vast that for many years to come the import of capital goods will necessarily continue. In any case, the State monopoly of foreign trade—actual control over what is imported and exported—is vital to the carrying out of any planned system of production and distribution and capital development.

Apart from questions of the balance of foreign trade, the further special factor which has to be taken into account is the need for changed technique, apart from the mere expansion of capital equipment. In general this finds expression in the use of the fund for depreciation which each industry has to establish as a charge against production costs. Obviously, also, every new factory constructed is built on the most modern lines. But there is one general change in technique which has been considered so vital that allocations for it have been made even in the darkest days of the Revolution—that is, the development of electricity. It is not only a question of gradually extending the use of electricity in existing industry and on the railways : there is an immense scheme, on which work was actually begun as early as 1919, for the creation of a network of regional stations through the whole Soviet Union. Every year a very substantial allocation is made for this purpose—in 1929-30 the assignment from the State Budget was £31,000,000—apart from the development of smaller industrial and general stations, for which a further £30,000,000 was allocated. The object of the regional stations is to effect an enormous economy over wide areas in industry, transport and agriculture ; already in 1929-30 the output of electricity was 340 per

cent. of the 1913 output, and the Five Year Plan provides for an output in 1932-33 over eleven times the 1913 figure. The electrification scheme was introduced by Lenin as an essential condition for the successful development of socialist production, and this scheme is regarded as perhaps the most necessary part of the expansion of industry.

The allocation for developing transport facilities depends on the projected developments in all other industries. The building of the railway linking Turkestan with Siberia illustrates this point. The development of the cotton textile industry was decided upon, to meet the increasing demands which followed from the annual increase in the volume of wages. This involved an increase in the supply of raw cotton, which could not be provided by larger imports owing to the position of the trade balance. Cotton could be grown in far larger quantities in Turkestan, but for the fact that much of the suitable land there was used for growing grain. The solution was found in the construction of a thousand-mile railway line from Siberia, by which Siberian grain could be brought to Turkestan, freeing the whole area for cotton growing ; the story of the project and its fulfilment is vividly told in Victor Turin's film *Turksib*, which many readers will have seen. But the Turksib railway is only one instance of the many transport developments which are being made year by year, in close dependence on the extension of other industries. At the same time, the unification of all forms of transport (under the Transport Commissariat) makes it possible to plan the development of transport as a whole, and to use the allocation for this purpose either for railway, river or road transport in accordance with the needs of the situation. An example of the increased use of the Volga shipping as an alternative to the overloaded

railways has already been given in the chapter dealing with transport organisation : it involves the building of more river steamers and barges, and a corresponding development of the shipbuilding industry.

Thus the allocations for the development of particular branches of industry are made on the basis of certain general principles—especially the annual increase of production of consumable goods and of agricultural products, and the raising of the technical level of production, including such far-reaching schemes as general electrification. The decisions on these principles serve to guide the particular allocations, which in turn are interdependent on each other. A part of the development of each industry is automatic, and is provided for by the portion of profits retained by each industry ; but the remainder of the profits made by each industry is mobilised and can be used (together with other centrally-accumulated funds) for a consciously-directed development of the whole system of production and distribution. This control of economic development is one of the most important aspects of the organisation of central planning.

Another general economic question which has to be settled in principle is the question of prices. Taking State industry as a whole, it is obvious that the prices at which goods are sold must ensure a surplus over the cost of production in order to provide for the expansion which has just been described. In the same way, inasmuch as the expansion of co-operative agricultural production out of its own resources is part of the general economic plan, the prices secured by the Collectives for their agricultural products must result in a surplus over the cost of production. On the other hand, to leave prices altogether free and unfixed would introduce an element of chaos which would make a centrally planned scheme

unworkable. Yet to fix wholesale and retail prices for the whole range of products of a modern industrial system would require an almost superhuman organisation and administration. Moreover, outside of State industry there is still a considerable volume of petty production in certain industries (clothing, food, etc.) even apart from the individual production in agriculture ; and the universal fixing of prices—apart from the difficulty of administrative control—might involve the holding up of production in small enterprises which the State is unable to take over and organise.

The compromise adopted is the fixing of wholesale prices for the products of State industry, together with an attempt to concentrate retail distribution in the hands of co-operative organisations working on a fixed percentage addition to wholesale prices and transport charges to cover their costs and provide a surplus. The first basis for the fixing of prices is the actual cost of production in the preceding year, which is analysed for each industry and class of product. On this basis, adjustments are made for each factor in the calculation, in accordance partly with known changed conditions and partly with changes which the industry is instructed to carry out. For example, a change in the fixed price of any raw material is a known change in costs for each industry using that raw material ; the percentage increase of wages is another known cost. But in addition there are certain general instructions given to increase output and cheapen costs by the introduction of more efficient machinery or methods of organisation, and the saving which should result from applying these instructions is also taken into account in calculating the cost of production for the ensuing year. It will be realised that the correct calculation for each product is closely dependent on the whole system of

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centralised planning, including capital outlays to improve machinery and methods.

In *The Social-Economic Forms of Industry in the U.S.S.R.*, Kuperman gives a table showing the average costs of production over State industry (in the R.S.F.S.R. only), expressed in the percentage share of each item to the total cost of finished articles at the point of production (factory production cost), with further items representing the expenses of the wholesale distributing apparatus of the industrial Combines (commercial costs). These items are :

<i>Elements of cost</i>	<i>Percentage of total factory cost</i>
1. Raw materials	41.5
2. Auxiliary materials	8.5
3. Semi-manufactured articles	4.5
4. Fuel and power	4.4
5. Wages of workers	20.7
6. Wages of employees	2.7
7. Percentage additions to wages	6.5
8. Depreciation	3.3
9. Royalties	2.2
10. Other taxes and dues	1.9
11. Miscellaneous overhead costs	3.8
<i>Factory production cost</i>	100.0
12. General administration (of Combine)	1.6
13. Interest charges	1.8
14. Excise duties	7.8
15. Trading costs	8.2
<i>Commercial production cost</i>	119.4

Some of these items require explanation. Item 7, percentage additions to wages, is made up of social insurance contributions, contributions to cover the cost of factory committee work, etc., which are legally payable by the employing concern. Item 9, royalties, represents a certain form of taxation—payments to the State for the exploitation of forests and minerals, based on actual output. The item of miscellaneous overhead costs covers the upkeep of offices, lighting, heating, etc. The excise duties payable form a relatively high item in the average commercial cost, but they fall chiefly on a few special industries—such as drink, tobacco, matches, silk. Trading costs cover the expenditure on the wholesale trading apparatus—offices and staff—as well as transport, warehousing and similar charges.

These are the elements of cost which have to be calculated in detail and adjusted each year as the basis for fixing (1) the wholesale price charged by each productive unit to the appropriate Combine ; (2) the wholesale price charged by the Combine to other Combines, co-operatives or other customers. But the estimated production cost and commercial cost form only the basis ; to these are added a certain percentage to provide a surplus or "profit." On the average, this addition to costs to allow for profit is 8 per cent. But the percentage addition is not uniform ; its application to particular industries has a somewhat similar purpose to the imposition of excise duties. The percentage added to costs in fixing wholesale prices for beer and silk, for example, is considerably higher than in the case of building materials, agricultural requirements and articles regarded as of prime necessity. The system of price-fixing is, in fact, used firstly to ensure that there is a general surplus over production costs, and secondly to help forward the

industries regarded as vital—not, however, by fixing prices which would give these industries higher profits, but, on the contrary, by allowing them to function even though they are not at the time able to make the same rate of profit as other industries.

The fixing of prices is not extended into the retail trade. Any central influence on the retail price of particular commodities exists only in so far as the retailing co-operative societies are expected to work on a basis of an average percentage addition to wholesale prices, based on the cost of maintaining their retail apparatus and showing a surplus. In 1929–30 this addition was 30 per cent. ; the co-operative society was expected to work on this basis, but with freedom to vary the percentage addition from one class of articles to another. Outside of the co-operative network (and certain State and municipal stores) there is no regulation of price, and private traders and shopkeepers can, in fact, get prices considerably above the prices for similar articles in the co-operatives. This will continue until the quantity of products of State industry, which find their way to the consumer mainly through the co-operatives, becomes large enough to meet the full demand, when the private trader and shopkeeper will be forced out of business by the lower prices which centralised production and distribution can afford to accept.

The general plan for each year aims at lowering the costs of production and, therefore, factory prices, wholesale prices and ultimately retail prices. The most important factor for reduced costs is increased labour productivity, made possible by the technical improvements which result from capital outlays—the process of rationalising industry. The second factor is the economy of raw materials and fuel which results from the same process.

The third factor is the reduction of overhead expenses by better organisation ; while economies in transport and general organisation are important factors for a lower "commercial production cost." Each of these factors is carefully examined, and instructions are issued to make those economies which seem possible. At the same time the increased labour productivity is accompanied by the rising level of wages and by the reduction of hours to seven per day—all newly-constructed factories work a seven-hour day, and existing factories are brought into the seven-hour scheme when the rationalisation process has been carried through. This is a settled principle to be carried out in each year's plan, the reduction to a seven-hour working day applying to the whole of industry by the end of the Five Year Plan, in 1932-33. Taking into account the sections of industry (mining, metallurgy, etc.) in which the working day is six hours, the average working day in 1932-33 is to be 6.86 hours. This reduction in the working day, together with the increase in real wages, are factors making for higher production costs, but they are more than offset by the economies in production methods which are being brought into force year by year.

In the case of transport charges, a general alteration in principle has recently been made. The principle formerly used was, broadly speaking, "what the traffic would bear." In connection with the proposed reorganisation of industry in a number of "regions," each of which is to be as economically independent as possible, the principle of transport charges has been fixed on the same basis as the prices of industrial products, namely, actual costs plus a percentage to yield a surplus. The theory is that a strict costings system will help in the determination of proper industrial regions, one of the objects of which is to eliminate unnecessary long-distance transport ; transport

charges based on costs also facilitate the division of the railway system into financially independent units.

The final general point in connection with price fixing is the relation between the prices of agricultural and industrial products. The most immediate purpose of lowering the costs and prices of industrial products is to bring them into closer relation with the prices of agricultural products, which in itself will improve the material position of the peasantry—they will get more industrial products (means of production or articles of consumption) in exchange for their surplus produce. The level of prices for agricultural products is maintained as nearly constant as possible, through the fixing of prices for advance contracts which a considerable section of the peasantry, and the Collective farms, make with the Co-operatives which collect grain or other products. The inducement to enter into these contracts is some form of loan, especially loans for purposes which will increase the output of the farms concerned or improve its quality. The provision of sorted seed, of agricultural machinery, fertilisers, fresh stock, etc., on loan is a very powerful attraction to the peasantry, who are willing in return to contract for the sale of their products at definite prices. But the prices published as an indication to the co-operatives of what they should undertake to pay for products contracted for in this way, are not compulsory prices so far as the peasants are concerned, and the effectiveness of the prices indicated entirely depends on whether the co-operatives have real inducements to offer the peasants in return. Thus there is a general tendency towards the level of prices indicated, but it will become entirely effective only when the Collective farms (together with the State farms) have developed sufficiently to supply the towns with all their requirements.

CHAPTER XIV

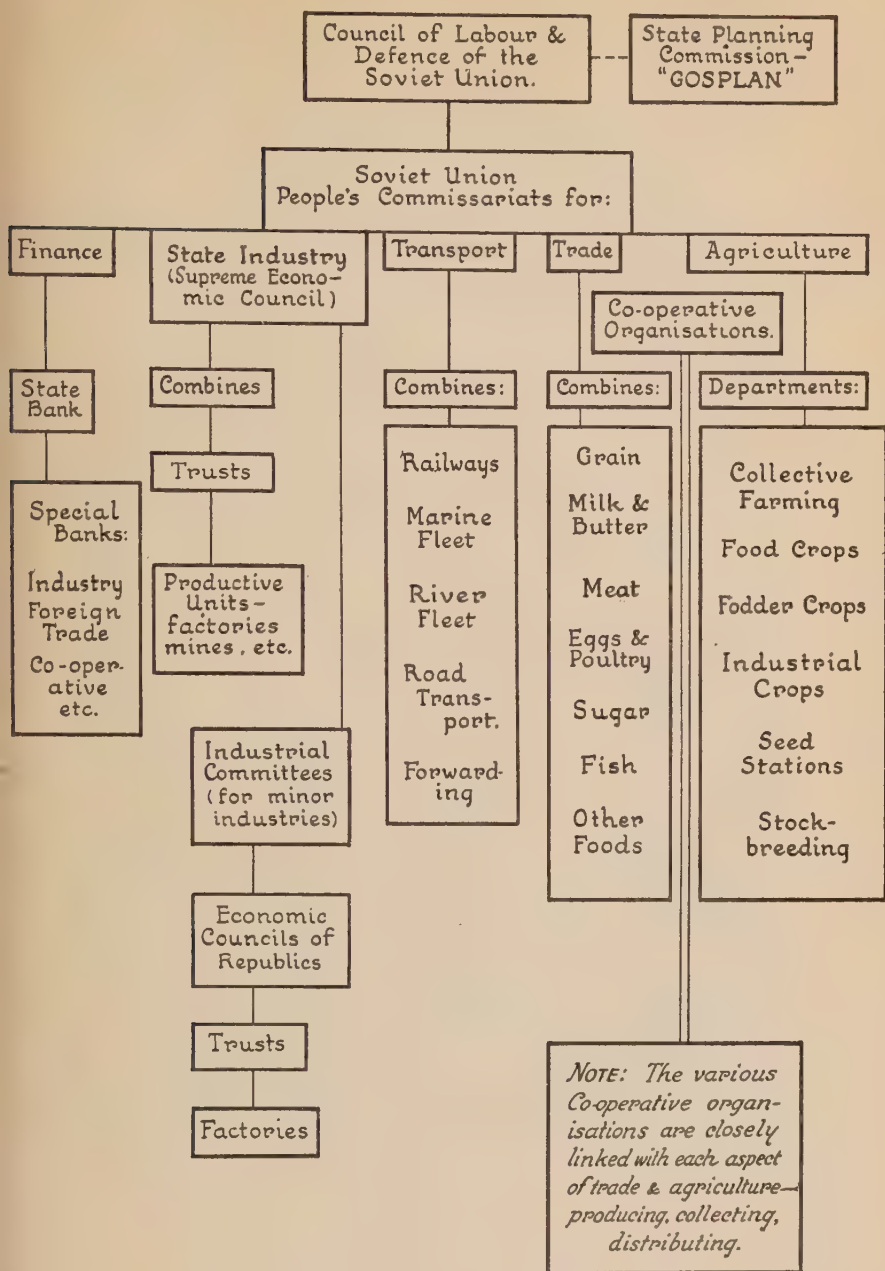
THE SYSTEM AT WORK

The central feature of Russia's system of production and distribution is that it is a planned system. The element of planning was present in the Soviet economic system from the earliest days of the Revolution, finding its first expression when the Supreme Economic Council was formed on December 1st, 1917, less than four weeks after the establishment of the Soviet Government. The function assigned to the Supreme Economic Council in the first place, and later to the Council of Labour and Defence, was the regulation of Russia's economic life. But before any real regulation, any planned guidance of Russia's economic life, could be operated, a long period of clearing the ground and building up an effective organisation had to be passed through. The clearing of the ground involved the expropriation and transfer to the State of all large-scale industry and a part of petty industry, which had been completed by the end of 1920 ; by this time, too, the armed attacks on Soviet Russia had been finally defeated. Since 1921 the work of building up organisation, both at the centre and the periphery, has been continuous ; and in the first few years much energy had to be spent on repairing the damage of the long war period from 1914 to 1920. The attainment in 1927 of the pre-war level of production marked the completion of the restoration period, and the adoption of the Five Year Plan, beginning to operate from October 1st, 1928,

showed that the organisation which had been slowly developed in the preceding years could now be set a definitely planned programme of work.

The Five Year Plan was by no means the first plan to be put into operation. From the first moment when the factories and mines were taken over by the State, estimates of production were prepared, and after the end of the armed attacks on Soviet Russia, with their perpetual interference with production and transport, the estimates for each factory and branch of industry began to have greater reality year by year. The scope of these estimates was gradually extended, and the estimates for each industry were more effectively co-ordinated with each other. The plan by which each industry and factory was guided in its current operations was fixed for each year in advance ; this was known as the "operative" or Annual Plan. The economic year (which is based on the agricultural year) runs from October 1st to the following September 30th, and the plan for each industry and factory had to be fixed some months before October in order to enable the management to make the necessary preparations. But in the earlier years the plan could not be definitely fixed before the yield of the harvest was fairly accurately known, since this necessarily affected the details of the plan. As the harvest could not be properly estimated until about September, the annual plan was always late, and was often not published until two or three months after the economic year had begun. The practice was therefore adopted of issuing a provisional plan in June for the economic year beginning in October ; this plan was known as the "control figures" ; it served as a provisional guide to industries, but was subject to alteration when the definite Annual Plan was produced. From 1928, however, the Annual Plan was abolished, its place being

GENERAL ECONOMIC ORGANISATION



entirely filled by the "control figures" issued in June and covering the twelve months from the following October 1st.

Apart from the annual plan or control figures for each year, which constitute a detailed programme of production and distribution on which each industry works, there were also the "perspective" plan for five years ahead, and the "general" plan for fifteen years ahead. The Fifteen Year Plan was in very general terms, indicating the policy which it was proposed to carry out rather than laying down concrete work for industries and branches of industries. The Five Year Plan, on the other hand, was in considerably greater detail, in particular showing the capital extensions which would have to be completed during this period. Inasmuch as the regional electricity stations take on the average four years to build, and any large industrial factory may take two to three years to complete, the Five Year Plan is a vital necessity, although it has to be made more concrete and detailed for each year, as it arrives, in the Annual Plan. Finally, the stage was reached in 1928 when it was possible to make a detailed annual plan for five years ahead, with the assurance that it could be carried out, and that any variations found to be necessary could be introduced in the "control figures" for each year. This is the Five Year Plan which began to operate in October 1928. Before examining the details of the plan and the extent to which it is being carried out it is necessary to show what proportion of industry is covered by the plan and what proportion can be directly controlled by the central economic apparatus of the State—the apparatus which is shown in diagram form on page 243.

The plan necessarily covers the whole economic life—and social life, so far as it is expressed in economic terms—of the Soviet Union ; the plan could be only a partial

estimate and not an economic plan if it left certain items out of account. The summary headings of the plan shows its comprehensiveness—Population ; Accumulated Funds (total capital) ; Capital Investments (annual additions) ; Total Value of Production ; Electrification ; Industry ; Agriculture ; Transport ; Housing ; Budget (State and Local) ; Finance ; Prices. Each group is worked out in considerable detail, showing the estimated position for each of the five years. The estimates for production are comprehensive, including production in private hands as well as State and Co-operative.

But although the plan is comprehensive, it is only what is called the socialised sector of industry—State and Co-operative—which is subject to direct guidance and can be set definite programmes of output and development. The non-socialised sector—industry in private hands, and individual peasant production—is necessarily taken into account, but almost as an external factor which can be estimated but not influenced, except in so far as it is transformed and brought into the socialised sector. The best example of this is the anticipated annual transformation of a part of individual peasant production into co-operative production through the extension of Collective farms.

For statistical purposes, the whole industry of the Soviet Union is divided into two groups—census industry, which makes regular returns of output, and non-census industry. Census industry covers all enterprises employing 30 or more workers, where no machinery is used, or 16 or more workers with machinery. The output and general position of census industry is accurately known, as it is continuously recorded by the Central Statistical Office of the Soviet Union. The output of non-census industry—enterprises employing less than 30 workers without machinery, or 16 with machinery—is only known from occasional

censuses, generally confined to certain typical districts. In the main, non-census industry consists of quite small workshops run by individuals with their families, and also of home production—the peasant handicraft or *kustar* industry ; it is privately-owned, but for the most part no outside labour is employed apart from the individual's family. At the same time, the total value of production of non-census industry is quite substantial : in 1927–28 it was estimated at 15 per cent. of the total value of industrial production (excluding agriculture). Such a substantial percentage of total industrial production must obviously be taken into account in a general economic plan ; but, on the other hand, from its very nature non-census industry is fairly stable, and variations from year to year are not important enough to affect the general plan even if they have not been foreseen.

Census industry, now producing about nine-tenths of the total value of industrial production, is the most important factor in the general economic plan, not only because of its present absolute “ weight,” but because it is the factor which is subject to considerable changes—changes which can be guided and assisted. The overwhelming proportion of census industry (89.7 per cent. in 1929–30) is in the hands of the State ; and 9.6 per cent. in 1929–30 was in the hands of the Co-operatives. In effect, this means that practically every industrial undertaking of any size is in the hands of the State, and its activities can be directly guided ; while other large industrial undertakings are in the hands of the Co-operatives, and their work can also be brought into the plan. Moreover, the most important of the privately-owned undertakings in census industry are those which have been leased as “ concessions ” to foreign capitalist groups, and the terms of these concessions include definite stipulations

covering both annual output and capital investment, so that their activities also can be brought into the general plan with a high degree of accuracy.

In the case of transport, the whole of the railway system and the sea-going merchant fleets are in the hands of the State, as also are the important river fleets and such road motor transport as exists. Other transport is purely local in character, and although it fulfils absolutely essential economic functions it is of a regular character, and important variations will only occur in so far as it is displaced or supplemented by State-controlled transport. Therefore the whole system of transport can be taken into the general economic plan.

Agriculture presents the greatest difficulties in the preparation and carrying out of the plan. Nevertheless, the most uncertain factor—individual peasant production—has the compensating advantage (from the standpoint of planning) that it is mainly for home consumption, and that it is only the marketable surplus which has practical importance for the general economic plan. The efficiency of the plan in relation to agriculture therefore depends on the extent to which the marketable surplus of agricultural products can be brought into channels which are subject to control and guidance—that is to say, into the State or Co-operative machine. This is the importance (again from the standpoint of planning ; it has also great importance from the standpoint of increasing the amount of the marketable surplus) of the growth of Collective farming and all other forms of co-operation in agriculture ; while the building up of the State farms creates a new section of agriculture which is directly governed by the central plan. It was estimated that before the war the grain actually marketed came from the following sources—from large estates, 21.6 per cent., from

the *kulaks* or large farmers, 50 per cent. ; from the medium and small peasant holdings, 28.4 per cent. In 1929-30 more than 50 per cent. of the total marketed grain was estimated to come from the State and Collective farms, about 15 per cent. from *kulak* farms, and the balance from medium and small farms not yet organised in collectives. Each year the State and Collective farms are acquiring greater importance in the total of grain marketed, and by the end of the Five Year Plan—1932-33—practically the whole of the marketable surplus of grain will come from State or Collective farms. In butter, meat and other produce put on the market the position is much the same ; and in industrial plants—cotton, flax, etc.—practically the whole of the output already passes to the Co-operative and State organisations, because there are no other buyers.

The inclusion of agriculture in the economic plan is therefore not so difficult as the existence of peasant production might suggest ; and, in fact, the marketable surplus passing through the hands of State and Co-operative organisations each year very closely corresponds with the plan. As the Collective farms extend among the peasantry, and new Soviet farms are started, the problems will be simpler.

Thus in industry, transport and agriculture the system of planning can be operated and controlled to a degree which is already high enough to secure results, provided that the whole administrative machinery of planning, production and distribution is efficient. As we have seen in earlier chapters, the producing and distributing machine is now organised in huge industrial combines, working on an independent financial basis, but along the lines laid down for them by the central plan. The same principle of autonomous working is carried right down to the

lowest productive unit, which is set its programme of production as a part of the programme for the industry concerned. Nor is it only the directors and managers who are responsible for carrying out the plan. The plan for each productive unit is known to the workers in that unit ; progress is regularly reported to them, and under the stimulus of Communist Party groups or " shock " groups of Party and non-Party workers they are kept interested in the carrying out of the programme. The Press also plays an important part in ensuring the carrying out of the plan. Reports are constantly published showing progress made in particular industries and important factories, calling attention to shortcomings and generally serving as a basis for action not only by the administrative authority concerned, but by the technical staff and the general body of workers as well as by the Communist Party and trade union organisations. Nothing is kept private : the output, output per head, cost of each unit, cost of administration and transport, and every other factor which the responsible manager of an undertaking must know is known not only by the manager, but by the workers of every grade. This is of great importance for the actual carrying out of the plan within each factory, and the connection of the work of each factory with the success of the general plan—involving as it does improved wages and conditions, the extension of social services and of housing—is also known and appreciated through the publication of the plan in all its details and the explanations and discussions on the plan which are made at the production conferences in each factory.

It is largely to this wide diffusion of a sense of responsibility for the carrying out of the plan that its success has been due. In the first year of the plan—the twelve months from October 1st, 1928, to September 30th, 1929

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—the index of the total volume of production, according to the plan, was to rise by 11.7 per cent. over the previous year's figure ; it actually rose by 12.6 per cent. The percentage increase in production planned for 1928-29, the actual increase in that year, and the "control figures" increase (i.e. planned increase) for 1929-30 are shown in the following table :

	<i>Percentage increase over previous year</i>		
	1928-29 <i>Plan</i>	1928-29 <i>Actual</i>	1929-30 <i>Control figures</i>
Industry-census	18.4	21.1	31.4
" -non-census	6.7	4.3	7.3
Agriculture	3.5	1.8	2.7
Forestry	12.0	11.7	11.6
Fishing	6.3	6.1	14.0
Building	23.5	24.5	66.6
Transport	9.5	20.5	18.3
Post, etc.	9.8	9.8	33.6
Trade turnover	21.0	24.0	34.6
General average	11.7	12.6	21.3

The control figures for 1929-30 are considerably higher than those originally laid down for the second year of the plan, because the actual success of the first year's working—in particular the increase in the output of large-scale industry—provides a basis on which more rapid progress can be made. In the actual output during the second year of the plan there was no indication of any slacking of pace, and it is to be expected that the accumulated experience from year to year will improve both the work of planning and the actual operation of the plan. This is facilitated not only by the accumulated experience, but also by the extension of the "socialised sector"—the sector which is in the hands of the State or Co-operatives—which is taking place every year.

The growth of the socialised sector in agriculture through the extension of State and Co-operative farming

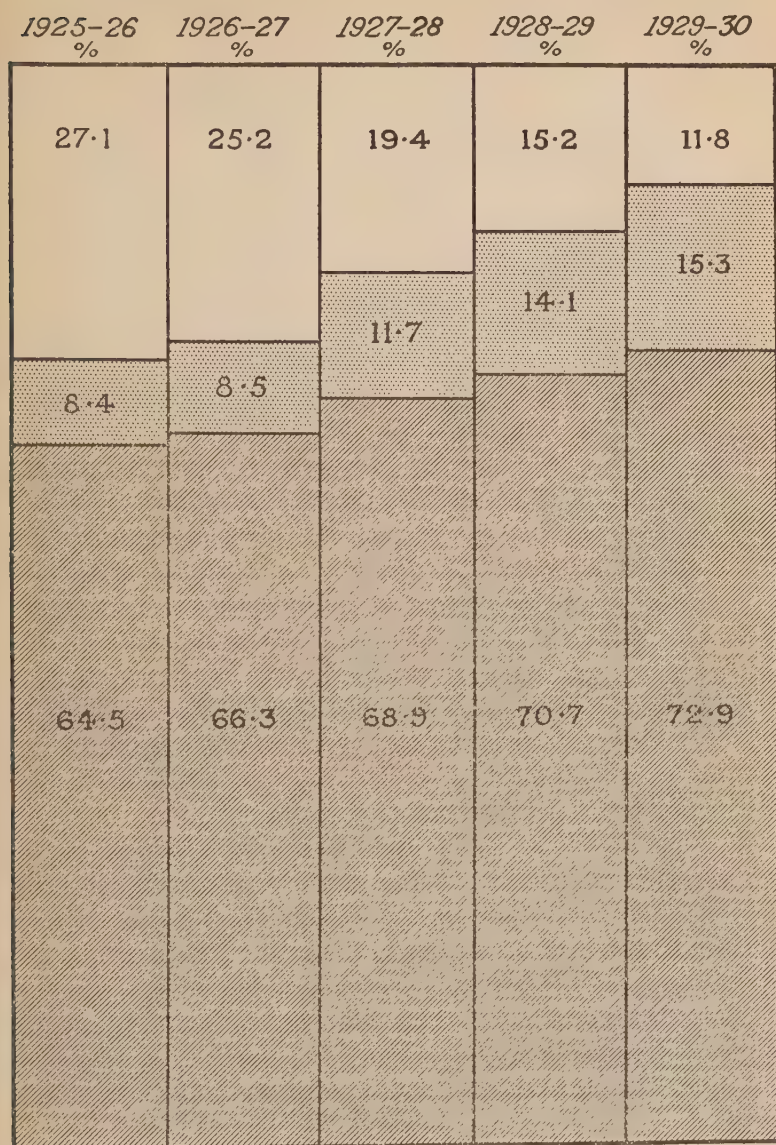
has already been described, and there is no reason to doubt that the process will continue. The temporary setback which occurred in the early part of 1930 through the collapse of a number of Collective farms undoubtedly proved that the progress of collectivisation had been too rapid. But it was too rapid not in any abstract sense, but because it had outrun the plan. The grain area of Collective farms in 1929 was nearly $2\frac{1}{2}$ million acres more than the plan had anticipated. The economic purpose of collectivising grain cultivation is to be able to use large-scale farming methods, and in particular to use tractors. The 1928-29 plan, on the basis of the expected increase in the grain area of Soviet and Collective farms, had made provision to supply 9,700 tractors, and 9,700 tractors were duly supplied. But this number was hopelessly inadequate for the actual increase in the area which the peasants were prepared to work collectively, and without the tractors the collective working of the land showed no immediate economic advantages. As a result, large numbers of Collectives which failed to obtain tractors inevitably collapsed : but this does not mean that they will not be re-formed when the tractors are available and immediate economic advantages can be secured from collective working.

The whole incident is an illuminating example of how the plan is built up and how its parts hang together. The outcome of the more rapid collectivisation than had been originally provided for in the plan has been a revision of the relevant parts of the plan. For the year 1929-30 the original plan (the Five Year Plan) had proposed agricultural machinery output to a value of approximately £26,000,000 ; the revised control figures for 1929-30 (on which work for the year is actually based) raised the planned output of agricultural machinery to £37,000,000,

an increase of £11,000,000 ; and the supply of tractors was increased to 41,000 instead of the 25,000 originally planned. Moreover, the construction of great new agricultural machinery factories was begun, in order to make possible still further increases of output in the following years. With this material basis, the development of Collective farming was resumed, and there can be little doubt of the general stability of these farms when they are adequately supplied with tractors and other machinery. The economic advantages of large-scale farming are beyond question, and collectivisation brings immediate gains to the peasants whenever the material basis—agricultural machinery—is available. Owing mainly to this factor, but partly also to the political measures against the *kulaks*—especially heavy and increasing taxation—individual peasant farming is steadily being eliminated, and the work of planning in relation to agriculture is being simplified.

In industry the "socialised sector" predominates. Its importance is actually greater than the figures already given suggest. In 1929 the value of its output (State and Co-operative together) was 88 per cent. of the total value of industrial production ; but State and Co-operative enterprises provide nearly the whole output of the most important branches of industry. Practically the whole of each of the industries producing means of production—coal and other mining, oil, metallurgy, and heavy engineering, building materials and heavy chemicals—is in the socialised sector. Of the chief industries producing articles of consumption, such as cotton, wool, linen, and leather products, more than 90 per cent. is in the socialised sector. It is only in such industries as clothing and food products that the socialised sector produced less than 90 per cent. of the total. Even in these industries the socialised sector is rapidly extending, because small producers (as a rule

PROPORTION OF TOTAL VALUE OF INDUSTRIAL PRODUCTION ATTRIBUTABLE TO STATE, CO-OPERATIVE AND PRIVATE CONCERNS



PRIVATE..... ☐ CO-OPERATIVE..... ☐ STATE..... ☐

not employing labour apart from their families) are being brought into the co-operative network. The tendency is shown by the following figures for non-census or small industrial concerns :

	<i>State</i>	<i>Percentage of total marketed output</i>	
		<i>Co-operative</i>	<i>Private</i>
1925-26	5.0	13.1	81.9
1926-27	4.3	13.6	82.1
1927-28	6.2	23.2	70.6
1928-29	7.0	30.8	62.2
1929-30	6.8	37.9	55.3

In census or relatively large-scale industry, the movement has been from 96 per cent. (State and Co-operative together) in 1925-26 to 99.3 per cent. in 1929-30. While, however, the enlargement of the socialised sector in small industry has come about through the absorption of private producers into producing co-operatives, the enlargement in the case of large-scale industry has been due to the absolute increase in the output of State and Co-operative concerns, with relative decline in the output of private concerns. The movement in industry as a whole—large and small combined—is shown in diagram form on page 253 ; in 1929-30 the combined share of State and Co-operative output was 88.2 per cent. of the total. It is therefore clear that the preparation and carrying out of the plan in industry is already assured by the extent of actual State and Co-operative control.

The Five Year Plan is an immense work in itself, and it does not make light reading. But it is of immense interest as the first comprehensive and long-period economic plan which has ever been prepared, and the fact that the programme of the first two years has actually been carried out shows that both the machinery for preparing the plan and the machinery for carrying it out exist and are effective. The plan is not an abstract theory, but an assembling

of concrete facts and developments which can be controlled and co-ordinated.

The scale of the development planned can be realised from the total capital outlays to be made during the five years—over £6,000,000,000, of which £1,600,000,000 is for industrial development, £1,000,000,000 for transport, £300,000,000 for electrification, and £2,300,000,000 for agriculture. The sums seem fantastic: but the capital development in the first year, planned at £527,000,000, was actually £556,000,000, and the second year's estimate was raised from £741,000,000 to £1,000,000,000.

The aim of the capital outlay in industry is not only to secure a better balance between industry and agriculture. It is to increase the products of industry so that the standard of living can be raised; and it is also to provide for raising the technical level of agriculture. More than a third of the total capital outlay provided for in the plan is for the technical improvement of agriculture—the substitution of mechanical power for the combined labour of men and beasts, the reduction of the peasant's working day, and the raising of the village population to the material and social level of the town workers.

The plan “balances”: it is not only a plan of production, but also essentially a plan of distribution. The net value of the annual production is to be increased in the five years to September 30th, 1933, from £2,470,000,000 to £4,300,000,000, while there is to be a reduction in prices by 18 per cent., so that the total physical volume of products will be more than doubled. While a part of this increase will be set aside each year and absorbed in the greater volume of capital accumulation, the major part will be turned over to the workers and peasants for consumption, raising the real income—the standard of living—by 71 per cent. in the five years. In comparison with the

1913 level, the real wages of industrial workers will be 208 per cent. ; while the real income of the peasantry will average 167 per cent. of the 1913 level. In the course of the five years the number of workers in State industry is to increase by 700,000. In the five years £150,000,000 will have been spent on houses for the workers ; a considerable part of this is for the building of new towns around the great new factories which are now under construction—£41,000,000 is for housing in the engineering industry alone, and £24,000,000 for housing in the coal industry. The amount devoted to scientific research rises from £2,400,000 in 1927-28 to £16,200,000 in 1932-33. In the same period the item for educational expenditure in the State Budget rises from £103,000,000 to £299,000,000 ; the total of the “ social and cultural ” State expenditure (including education) rises from £240,000,000 to £588,000,000. The development of production according to the plan is *for* these precise purposes of distribution which are equally clearly laid down in the plan.

Has this plan reality ? Is there really a prospect of a steady and uninterrupted rise in production which will make possible both the capital accumulation—the building of new factories, mines, railways, etc.—and the greater distribution to the workers and peasants ?

The answer to these questions has already been given by the first two years' working of the plan. Production has increased so rapidly that the original estimates have had to be revised to be completed in four years. Both in the towns and in the countryside conditions have improved : real wages have risen, the peasant's standard of living is higher, the social services have been extended and improved—all according to plan.

But it is perhaps not enough to know that the plan has been successfully carried out, even over a period of two

years. It proves that it is possible to plan the whole economic life of a vast country. It proves also that in the Soviet Union the system of planning and the form of administering industry are at least efficient. But is this success likely to continue? In spite of the proved workability of the plan, in spite of the relatively efficient organisation of the system, may it not be subject to those periodical crises which have affected and are affecting every other country in the world? Is there any reason to suppose that the Soviet Union is immune from these calamities?

This is a question which cannot be answered with statistics. Nor can it be answered unconditionally. There can be no doubt that any armed attack on the Soviet Union, however little it could achieve in disturbing the system, could seriously interfere with the carrying out of the plan of production and distribution. War means, speaking in terms of economics, the diversion of labour and resources from productive work; apart from the waste of life, it may mean also the physical destruction of factories and mines, railways and bridges, the burning of crops and grain reserves, followed by famine and pestilence. Similarly, a trade war waged by other countries in a determined attempt to hinder Soviet Russia's progress might make serious changes in the plan inevitable, and might delay for a time certain parts of the programme of industrialisation. These are factors against which no economic plan can provide.

Again, a disastrous drought over a wide area of the Soviet Union might mean a similar destruction of accumulated resources, a similar transfer of labour and supplies from the purposes laid down in the plan. But the plan itself is to a considerable extent an insurance against such an emergency. The work planned and already partly carried through in agriculture—irrigation, the introduction

of drought-resisting crops, the building up of grain reserves, the extension of the railway system to link drought areas with others—these are measures against drought which at least can mitigate its effects. A poor harvest will still be serious, and might entail delay in carrying through the plan ; but it could not involve more than a readjustment of the plan, a slight extension of the period within which the programme of construction is to be completed.

What of the “purely economic” crises—those crises which in other countries occur without war or crop failures? Crises in which stocks accumulate in warehouses and stores, prices fall, and production is checked, with the inevitable accompaniment of a sharp rise in unemployment—can such crises occur in the present productive system of the Soviet Union? The answer is to be found in the nature of the plan whose preparation and administration have been described. A system of production built on assured demand has no place for such crises. A demand which is definitely planned to keep pace with production contains no check which can hold up production. The problem in such a system must always be how to produce enough, how to plan sufficiently far ahead to ensure capital extensions which will enable a constantly rising demand to be met. The problem of sale in such a system exists only as a technical question of distributive machinery. To the extent to which the plan is a co-ordinated plan of production and distribution there can be no accumulation of stocks. And, in fact, since 1923, since the machinery of planning has been developed in conjunction with the machinery of administering the plan, there has been no crisis of sale in the Soviet Union. There have been many difficulties, but their nature has been entirely different from the economic crises with which other countries are

familiar. A crisis in the Soviet Union is solved by greater production, not by holding up production. Shortage of grain for the towns constitutes a "crisis" of a kind, but it does not mean closing down and unemployment. On the contrary, it brings in its train a vast extension of employment—the building of agricultural machinery factories, tractor construction, the opening up of undeveloped land by State farms, and the whole chain of activities through which the shortage can be made good. A shortage of cotton products results in the construction of a railway from Turkestan to Siberia, irrigation works, new methods of cultivation, and the building and equipping of new cotton mills. In a sense, each crisis of supply—each failure of the plan to provide for certain contingencies—provides a new stimulus, widens the scope of the plan, and makes it more certain that the plan as a whole will be carried out. The very fact that the plan is known, and understood in its bearing on their conditions, by the workers in every factory as well as by the administrative and technical staff, makes it possible to throw the necessary reserves into every economic "front." Therefore crises arising from errors in the plan—estimates which are not fulfilled, or unforeseen excesses over the estimate such as the unexpectedly rapid growth of collective farming—are solved by special planning, by adjusting the plan to take these factors into account, and by mobilising human interest and energy to speed up the process of adjustment.

The plan, in short, is not static. Nor is it an abstract product of statistical research into the figures of preceding years, from which conclusions are drawn as to the probable course of development in the coming year. It has nothing in common with the "business forecasts" which are entirely divorced from actual production. On the contrary, the productive system in the Soviet Union is built

up in such a way that the actual course of production and distribution are governed by the plan : the administration of industry radiates out from the central point where the plan is co-ordinated and directed. It is true that there is still a "non-socialised sector," both in industry and agriculture, in which production is not governed by the plan ; but changes in the output of this non-socialised sector are already of little relative importance, and that importance is declining further with the rapid growth of the "socialised sector." In any case, the non-socialised sector is a survival of another system.

In so far as the new system extends, there is co-ordinated production and distribution, there is a steady extension of the means of production and of the volume of products ; more labour is employed every year, working hours are being reduced, and—in spite of temporary shortages of certain products—conditions are improving for both the town and country population. Only an ostrich can continue to deny that these results are being obtained, and no economist, no politician, no employer and no worker can afford to ignore a new productive system which is giving such results.

APPENDIX I

RESOLUTION ON THE REORGANISATION OF THE MANAGEMENT OF STATE INDUSTRY, ADOPTED BY THE CENTRAL COMMITTEE OF THE COMMUNIST PARTY OF THE SOVIET UNION, DECEMBER 5, 1929

I. The Productive Enterprise

1. The productive enterprise is the basic unit in the organisation of industry. For this reason the foundation for further improvement in the system of management of Socialist industry must be the proper organisation of supplies, the technical attention given to the work of the enterprise, the most complete organisation of labour processes within the enterprise, the complete application of single control in the productive process, the creation of conditions which will ensure the maximum activity of the workers as a body and of the technical personnel of the enterprise, the selection of qualified managers, and the necessary degree of independence for the enterprise.

2. The placing of enterprises on a separate accounting basis has thoroughly justified itself. Independent accounting shows the real position of the enterprise, facilitates the rationalisation of production and the proper organisation of supplies and sales, while it also creates a force which runs counter to bureaucracy and intrigue. At the same time, the placing of each enterprise on an independent financial basis makes it easier to form a correct idea of the productive work of the enterprise and to keep the workers informed of the results of this work. Up to the present the placing of enterprises on an independent financial footing has not been universally applied ; it must now be applied in the shortest possible time to all State industrial enterprises without exception.

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3. Subject to the strictest observance by it of the production and finance plan, within the limits laid down, the productive enterprise must be independent. Its manager bears full responsibility for the carrying out of the programme. A definite sum, the amount of which is to be fixed annually in the financial plan, must be placed at the disposal of the enterprise. In accordance with the financial plan, the contract-order (i.e. the contract made with the enterprise by the Combine, to take over the planned output) must specify the estimated cost of production fixed for the year, with agreed adjustments to be made in the event of either party failing to observe the conditions of the contract.

4. The thorough-going application of independent accounting to all enterprises requires the further application of measures to ascertain the successful working or otherwise of the separate shops or departments. With this object in view, the enterprise must lay down a plan of work for each of its separate sections (shops, departments). For each shop or department a monthly statement must be drawn up showing its actual expenditure (including an allocation for its share of depreciation and overhead charges) ; and this must be compared with the result of its productive activities. The results shown by the enterprise as a whole and by each of its sections must be considered at the periodical production conferences ; and on the basis of this discussion the trade union must organise its mass economic work within the enterprise.

5. Each enterprise must draw up its separate monthly balance sheet. Credit will be taken for the products on the basis of the cost of production fixed in the contract ; and the difference between this sum and the actual cost of production is the main test of the successful work of the enterprise—subject to the strict observance of the conditions relating to the quality of the products. A part of this difference, the amount of which is to be fixed by law, should be left at the disposal of the enterprise, and when the annual balance sheet has been confirmed this sum may be expended, at the discretion of the

enterprise, on its own productive needs. In order to enable the enterprise to carry out its work at the fixed cost of production, the enterprise must be guaranteed delivery of raw materials and supplies at prices fixed in advance.

6. The work of preparing the accounts and reports of each enterprise must be tightened up. The completed monthly balance sheet, with the necessary details showing the cost of production for the main types of product turned out during the preceding month, must be ready not later than the 15th or 17th of the following month. The costings return must serve as the principal material for the technical management of the enterprise and for the introduction of measures of rationalisation subject to the absolute obligation on the enterprise to maintain the quality of its products.

7. The aims set before industry—increase in output, lower production costs and improvement in the quality of the products—make it essential that specialisation should be rigidly applied to every enterprise.

8. In order to ensure that the technical management of enterprises is improved, the Supreme Economic Council of the Soviet Union should give special attention to the development of factory and workshop laboratories ; it should increase the number of specialists directly engaged in production, and it should also strengthen the technical committees at each enterprise by the inclusion in these committees of representatives of the most efficient groups of workers, factory workers who have made inventions, and young engineers.

II. Combines of Enterprises

1. The existing system of Chief Committees for separate industries under the Supreme Economic Council of the Soviet Union does not correspond with the requirements of the period of reconstruction, especially from the standpoint of technical supervision. At the same time the Syndicates have gradually assumed control over the branches of industry with which they

are concerned, and most of the Syndicates have been compelled to deal with questions relating to programmes of production, capital extensions, planning, supply and distribution. As a result of this development there is a considerable amount of overlapping between the work of many of the Syndicates and the work of the Chief Committees under the Supreme Economic Council. It is therefore necessary to liquidate the Chief Committees and to set up new organisations on an independent financial footing, to control branches of industry (following the example of the textile industry organisation) on the same lines as the Syndicates.

2. The most important functions of these independent financial organisations must be :

- (a) to plan production in their particular branch of industry ;
- (b) to plan and supervise capital construction ;
- (c) to control the technical work of the industry ;
- (d) to organise the sale of products and purchase of raw materials and supplies ;
- (e) to control the commercial and financial activity of the subordinate enterprises ;
- (f) to deal with labour questions ;
- (g) to organise the training and allocation of technicians for the industry ;
- (h) to appoint and dismiss the managing personnel in the subordinate enterprises.

3. The Combines for various branches of industry may be of three types :

- (a) Combines covering only enterprises and Trusts of All-Union importance. Combines of this type control every aspect of the activity of the industrial units which they embrace, in accordance with the functions indicated in paragraph 2.
- (b) Combines covering both enterprises and Trusts of All-Union importance, and also enterprises and Trusts of

importance within a single Republic or district. In regard to the enterprises and Trusts of All-Union importance, such Combines fulfil all the functions laid down in paragraph 2 of the present section ; but in regard to the enterprises and Trusts of importance within a single Republic or district, the Combine fulfils the functions of a Syndicate, and in addition : the planning of production and capital construction, general technical control in connection with rationalisation and reconstruction, and general control in connection with the training of technical staff.

- (c) Combines of a Syndicate type, covering enterprises and Trusts which are only of importance within a single Republic or district. Combines of this type have only the functions of a Syndicate, but their duties include the general planning of production and capital construction as between the separate Republics and supervision of the process of rationalisation and, in particular, of technical reconstruction. The relations between the Combines and the Trusts of importance within a single Republic or district are on a commercial basis.

4. In addition to All-Union Combines, Combines uniting enterprises within the separate Allied Republics should also be set up.

5. The Combines, as independent financial units, must have their separate balance sheets, showing all the property and resources of the enterprises and Trusts of All-Union importance in the branch of industry concerned. The difference between the wholesale prices laid down and the actual production costs of the Combine's products constitutes the profit of the Combine.

In the case of Trusts of importance only within a single Republic or district which are included in the Combine, a special profit and loss account is drawn up by the Combine, the allocation to these Trusts being made on the basis of the products supplied to the Combine by each Trust. The Combine deals with these Trusts on the same conditions as those

which are now in operation as between the Syndicates and the Trusts.

The formation of Combines as comprehensive economic units must lead to the simplification of the system of taxation now applied to industry; the People's Commissariat for Finance and the Supreme Economic Council of the Soviet Union must work out a system of taxation based on a single levy on the total profit.

6. The work of the Combines must be specially concentrated on controlling the technical side of the productive work of the enterprises and Trusts which they cover. With this object in view, each Combine must form a special group of highly-qualified specialists freed from all current work apart from their immediate duties in connection with technical supervision. This group should work out the general lines of reconstruction for the branch of industry concerned, and must be made responsible for seeing that the technical experience of other countries, as well as the achievements of the most efficient Soviet enterprises, are utilised in other existing enterprises and in the new factories which are being built by the Combine. Technical administration throughout the Combine should be organised primarily on a functional basis.

7. In order to bring the work of the scientific research institutes closer to the practical problems of production, the scientific research institutes mainly specialising on questions connected with particular branches of industry should be handed over to the appropriate Combines.

8. The Combines must organise the supply of all important materials required by the enterprises under their control, either directly or by means of general agreements with other organisations handling the materials required. The Combines should establish machinery for carrying out such Supply operations in close proximity to the enterprises concerned.

9. In order to strengthen the rights and duties of the Combines in connection with current operations, both the Supreme Economic Council and the People's Commissariat for Trade,

in preparing the plan of commercial operations, should issue only general instructions for the reduction of wholesale prices, indicating the average reduction required but leaving the detailed work of fixing wholesale prices as far as possible to the Combines themselves.

III. *The Trusts*

1. On the formation of a Combine, enterprises may be included in it either directly or through Trusts. The work of the Trusts should be concentrated on questions of technical management, rationalisation and reconstruction, and, as a general rule, they should not undertake supply and sales activities. There may, however, be cases in which Trusts should be allowed to continue to function on the same lines as at present.

2. In order to ensure that the contemporary achievements of science and technique are made use of in the productive work of industrial enterprises, the Trusts must regard the following as their chief work :

- (a) to organise the interchange of technical experience between the enterprises under their control ;
- (b) to ensure that industrial enterprises utilise, with the least possible delay, the results obtained by the scientific and technical institutes, laboratories and other research organisations ;
- (c) to supply the enterprises with up-to-date information on technical developments in industry abroad, and to take steps to ensure that such technical improvements are applied as speedily as possible in enterprises within the Soviet Union ;
- (d) to see that the internal resources of the enterprise are fully mobilised, and that the warehousing of stocks is properly organised ;
- (e) to organise a rational system of records and accounts within the enterprises ;

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- (f) to ensure the immediate adoption in the industrial enterprises under their control of the standardisation worked out by the special institutions dealing with this question ;
- (g) to set up special departments to organise rationalisation.

3. The technical supervision of the enterprises should be carried out through a special group of highly-qualified specialists who should be freed from all other duties. The organisation of technical management by the Trusts should be primarily on a functional basis. In order to carry out the duties indicated above, the Trusts should make general use of the method of setting up temporary technical commissions composed of practical workers, including those who are most efficient, those who have made inventions, and the most experienced foremen and young engineers, empowering such commissions to work out details in connection with the introduction of new technical methods and the extension of successful experiments made at one enterprise to other enterprises.

4. The basis for technical control of enterprises by the Trusts must be the cost of production.

5. As a general rule, the Trusts should be built up on the general principle that the enterprises which they unite are in a single branch of production, with specialisation among the enterprises. Parallel Trusts, covering enterprises in the same branch of industry, should not be formed within one and the same economic region.

6. The central offices of the Trusts should be situated as close as possible to the enterprises which they unite.

IV. The Supreme Economic Council

1. The Supreme Economic Council must narrow the sphere of its activities in connection with the operative work of the organisations subordinated to it, and must give chief attention to the preparation of plans of production and finance

for the development of industry and for its technical reconstruction ; to co-ordinating the work of the separate branches of industry, to working out general directions for technical planning and the regulation of industry, and to seeing that these are carried out ; to completing the organisation of and assigning work to the economic units under its control.

2. The relations between the Supreme Economic Council of the Soviet Union and the Economic Councils of the Allied Republics will continue to be governed by the statutes now in operation. At the same time provision should be made for technical direction and technical aid.

3. The chief work of the Supreme Economic Council of the Soviet Union in connection with its control of the Combines must be :

- (a) to work out the main lines on which plans of reconstruction for each branch of industry should be prepared ;
- (b) to confirm the control figures and plans of capital construction ;
- (c) to appoint and dismiss the managers of the Combines ;
- (d) to confirm the balance sheets and reports ;
- (e) to authorise the distribution of profits and losses ;
- (f) to authorise the use of special capital funds ;
- (g) to audit and investigate the Combine's activities ;
- (h) to confirm the statutes and initial capital of the Combines ;
- (i) to lay down wholesale prices.

4. Both in the general (" perspective ") plan and in the current plan of industrial development technical factors must be given greater weight, and this makes it necessary for the Supreme Economic Council of the Soviet Union to set up a single department for technical and economic planning.

5. The department of technical and economic planning under the Supreme Economic Council must carry out the following essential work :

- (a) industrial planning ; the working out of the general

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plans and control figures ; planning the geographical distribution of enterprises and the formation of industrial regions ; the working out of questions of industrial policy and industrial legislation ; co-ordination of the work of the various Combines ;

- (b) direction of the technical reconstruction of industry ; the drafting of general lines of technical development ; the organisation of new forms of production ; specialisation, etc. ; general supervision of research and experimental work and the management of certain scientific research institutes directly subordinated to it ; supervision of the work of applying developments made abroad to Soviet industry, of the interchange of experience between various enterprises, standardisation and rationalisation.

6. The principal work of the Chief Inspection Department must be to see that the leading instructions of the Government and of the presidium of the Supreme Economic Council are carried out by all industrial organisations. The Chief Inspection Department should make full use of the Economic Councils of the Republics, and the District Economic Councils, in carrying out this work of inspection, and it should also draw in to all investigations the general body of workers and all social organisations.

7. The Supreme Economic Council must supervise the work of training qualified personnel, and the selection, allocation and use of trained personnel in industry. In this connection provision should be made for the fullest possible participation by the trade union organisations in the selection of personnel for managing positions in every link of the industrial chain.

V. Economic Work of the Trade Unions

1. In carrying through the reorganisation of the system of management of State industry, the trade unions and economic units must ensure the active participation of the workers

in decisions on all important questions affecting the management of their enterprises and of the branches of industry with which they are connected ; in the preparation and working out of plans and programmes of production, and in controlling the execution of these plans.

2. All trade union organisations, from the factory and workshop committees up to the All-Union Council of Trade Unions, should participate in the whole process of working out the control figures and industrial and financial plans, and in the allocation of programmes of output to Trusts, enterprises and sections of enterprises. With this aim in view, the trade union organisations should be continuously collecting, investigating and systematising all proposals put forward by the workers, by "shock brigades," production conferences and production commissions ; and on the basis of these proposals they should draft corrections and additions to the plans of production and finance of enterprises and other economic units.

3. The trade unions and economic units should organise their planning work in such a way as to ensure that the draft plans which they put forward (control figures, industrial and financial plan, etc.) are first considered at general meetings of the workers—production conferences, delegate conferences, or sectional or group meetings of the workers concerned.

4. The trade unions and economic units should pay special attention to encouraging the work of the "shock brigades" and to creating the conditions necessary for the extension of "Socialist competition." The economic units must arrange for the regular and strict recording of the results of Socialist competition and the work of the shock brigades, and of recommendations put forward by individual workers, by production conferences, temporary control commissions and similar bodies ; with the object of introducing, and applying through the whole of industry or particular branches of industry, all inventions or improvements brought forward by the workers.

APPENDIX II

DECREE ON THE REORGANISATION OF STATE INDUSTRY ISSUED
BY THE CENTRAL EXECUTIVE COMMITTEE AND THE COUNCIL OF
PEOPLE'S COMMISSARIES OF THE SOVIET UNION, FEBRUARY 13,
1930

1. The Supreme Economic Council of the Soviet Union is authorised, subject to the sanction of the Union Council of People's Commissaries or the Council of Labour and Defence, to set up All-Union Combines for the management of separate branches of State industry. Such Combines are subordinate to the Supreme Economic Council of the Soviet Union, and carry on their activities as independent legal entities on a separate financial basis but in accordance with the plan of work laid down by the Supreme Economic Council.

2. The Supreme Economic Council of the Soviet Union is authorised :

- (a) to wind up the activities of the Trusts and State Share Companies under its control, and also of the Syndicates connected with them ;
- (b) to confirm the statutes of the Combines, and also their capital, in agreement with the Union People's Commissariat for Finance ;
- (c) to determine the structure of the Combines, and to issue regulations for the placing of sections of the Combines on a separate accounting basis ;
- (d) to set up new Trusts of All-Union importance both within the Combines and independent of the Combines ; the previous sanction of the Council of Labour and Defence is not required if the Trusts are formed to work property under the control of the Supreme Economic Council or

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with resources assigned for this purpose in the Budget of the Supreme Economic Council ;

- (*e*) to issue model statutes for industrial enterprises organised in Trusts or directly entering into Combines, and also model statutes for sections of industrial enterprises (workshops, departments, etc.).

3. All questions arising in connection with the transfer to the Supreme Economic Council of the Soviet Union of enterprises of importance only within one of the Allied Republics, or of only local importance, must be settled by agreement with the Council of People's Commissaries or the Economic Council of the Republic concerned. If no agreement can be reached, the final decision lies with the Council of People's Commissaries of the Soviet Union ; but an objection to such a decision may be lodged with the presidium of the Central Executive Committee of the Soviet Union.

4. Paragraphs (*a*) (*d*) and (*e*) of section 2 of this decree apply also to other People's Commissariats of the Soviet Union.

5. The Supreme Economic Council of the Soviet Union must lay before the Union Council of People's Commissaries a draft decree for the management of State industry.

6. The Governments of the Allied Republics are recommended to undertake measures of reorganisation for the management of industry under their control, in accordance with the principles of the present decree.

APPENDIX III

EXAMPLES OF COMBINES

The details given in the following pages of some of the most important Combines in Soviet Industry give a better idea of the wide range of these organisations than any general description can convey. It will be noted that, in addition to controlling industrial concerns which are actually at work, the Combines are in many cases also directing the construction of new factories, while in every case the Combine controls the scientific research institutes which are working on problems connected with its particular branch of industry.

In the case of industries in which the number of separate factories or "productive units" is relatively large, the grouping of these productive units in "Trusts" is retained; in other cases the productive units are directly subordinated to the Combines.

Coal Combine ("Soyusugol")

1. Artem Coal Mines, Don Basin
2. Northern Caucasus Mines
3. Lugansk Mines, Don Basin
4. Stalino Mines, Don Basin
5. Don Basin Anthracite Mines
6. Moscow Coal Mines
7. Ural Coal Mines
8. Siberian Coal Mines
9. Far-Eastern Coal Mines
10. Central Asia Coal Mines
11. Kazakstan Coalfields Development Company
12. Pit Construction Company
13. Coal Research Institute

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Motor and Tractor Combine ("V.A.T.O.")

1. Automobile Construction Trust
2. Tractor Construction Trust
3. Southern Tractor Construction Trust
4. Cheliabinsk Tractor Construction Factory ("Amo")
5. Automobile Factory No. 3
6. Automobile Factory No. 4
7. Automobile Equipment Works
8. Motor Fire-Engines Factory

Machine Combine (General Engineering)

- I. Wagon Construction Trust
 1. Egorov Factory, Leningrad
 2. Wagon Factory, Tver
 3. Mytishi Factory, Leningrad
 4. Pravda Factory, Dniepropetrovsk
 5. Ust-Katav Factory, Urals
 6. Brake Factory, Yaroslavl
 7. Brake Factory, Moscow
 8. Krukov Factory, Dnieper
- II. Metallurgical Machinery Trust
 1. Kramatorsky Factory, Donetz
 2. Gorlovka Factory, Donetz
 3. Rykov Factory, Stalino
 4. Kharkov Factory
 5. Drujkovka Factory, Donetz
 6. Kovali Factory, Stalino
 7. Karl Marx Factory, Donetz
 8. Railway Workshops, Lugansk
- III. Sewing-Machine Trust (3 factories)
- IV. Oil Industry Equipment Trust (4 factories)
- V. Trust for Machinery required in working up Agricultural Raw Materials (8 factories)
- VI. Textile Machinery Trust (8 factories)
- VII. Chemical Industry Equipment Trust (6 factories)
- VIII. Crane Trust (10 factories)

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- IX. Factories directly subordinated to the Combine (not grouped in Trusts) (8 general engineering factories)
- X. Engineering factories under construction (4 concerns)
- XI. Machine Construction Institute

Electricity Supply Combine ("Energo-centr")

1. Moscow Region Electricity Supply Centre (6 stations, and 2 under construction)
2. Leningrad Region Electricity Supply Centre (6 stations, and 3 under construction)
3. North Caucasus Regional Board for Electricity (7 stations)
4. Urals Regional Electricity Board (2 stations)
5. Donetz Basin Electricity Trust (31 stations in the coal-fields ; Shterovka Central Station ; 2 building)
6. Nijni-Novgorod Central Station
7. Electricity Works Construction Company
8. Kiev Electricity Company (2 stations)
9. Yaroslavl Regional Station
10. Ivanovo-Vosnesensk Regional Station
11. Kharkov Electricity Supply (2 stations)
12. Zemo-Avtchal Regional Station (Caucasus)
13. Dnieper Electricity Supply ("Dnieprstroi")
14. Briansk Regional Electricity Board (4 stations)
- 15 to 25. Twelve Regional Stations under construction

All-Union Combine for the Textile Industry ("V.T.O.")

1. First Cotton Trust, Moscow	.	<i>Factories</i>	13
2. Second Cotton Trust, Moscow	.	.	10
3. Third Cotton Trust, Moscow	.	.	19
4. Fourth Cotton Trust, Ivanovo-Vosnesensk	.	.	38
5. Ivanovo-Vosnesensk Cotton Trust	.	.	21
6. Leningrad Textile Trust	.	.	18
7. Wool Board, Moscow	.	.	43
8. Silk Board, Moscow	.	.	13
9. "Kardo-Lenta" Trust, Moscow	.	.	8
10. Turkestan Silk Company, Tashkent	.	.	8

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11. Wool Company, Moscow
12. "Kenaph" Company, Moscow
13. Textile Organisation Institute, Moscow
14. Textile Scientific Research Institute

APPENDIX IV

MODEL STATUTES FOR AGRICULTURAL COLLECTIVES (ARTELS)

I. Objects

1. The agricultural workers, poor peasants and middle peasants of the village of district, province, unite voluntarily to form an agricultural artel in order to build up a large Collective farm on which the means of production are used in common and labour is jointly organised, and thereby to achieve a real and final victory over the *kulaks* and all exploiters and enemies of the toilers, over poverty and ignorance and over the backwardness of small individual farms, and to ensure a high productivity for the labour expended and a large marketable surplus from the Collective farm.

II. The Land

2. All boundary strips dividing the land holdings of members of the artel shall be abolished and all plots of land thrown into one large area of land to be used collectively by the artel. While all land holdings are fully collectivised, the land immediately surrounding the houses (vegetable gardens, orchards, etc.) remains for individual use ; although if necessary the size of the gardens can be altered, by a decision of the management committee confirmed by the general meeting.

3. The area of land belonging to the artel must not in any circumstances be reduced. The allotment of land, to members leaving the artel, from the land belonging to the artel, is prohibited ; members leaving the artel can receive land only from the land reserves of the State.

III. Means of Production

4. The following are collectivised : all draught animals, agricultural equipment, livestock producing marketable products, all stocks of seed, fodder sufficient to maintain the livestock which is collectivised, farm buildings required for the work of the artel, and all equipment for working up products. The dwelling-houses of members of the artel are not collectivised. The agricultural implements to be collectivised do not include smaller implements required for working the gardens, which are retained by the members of the artel for their individual use. If necessary the management committee of the artel may set apart from the draught animals which are collectivised a minimum number of horses to serve the personal requirements of members of the artel.

5. In the case of farms with only a single cow, the latter is not collectivised ; in the case of farms with several cows, one cow is left for personal use, while the others are collectivised. Cattle kept for breeding purposes are collectivised in all cases. A separate dairy artel is to be formed to exploit the milch cows which are collectivised.

6. The collectivisation of small livestock, such as pigs and sheep, is undertaken where this branch of agriculture is highly developed ; in such cases the artel determines the number of animals to be left with the members for their individual use. In districts where this branch of agriculture is not developed, pigs and sheep are not collectivised. Poultry are not collectivised in any case. But the Collective farms must prepare to organise a small livestock and poultry breeding industry.

7. As a measure of insurance against bad harvests and shortage of fodder, the artel shall set aside reserves of seed grain and fodder, which must not be touched.

IV. The Work of the Artel

8. The management committee and all members of the artel undertake :

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- (a) to extend the area under cultivation by making full use of the land at the disposal of the artel, by improving and preparing fallow land, and by surveying and re-arranging the land.
- (b) to use collectively to the fullest possible extent all the available draught animals, as well as all implements, tractors and other machinery, all stocks of seed and other means of production ; and to purchase tractors and other means of production, out of the artel's own resources as well as on credit, in order fully to mechanise the working of the collective farm.
- (c) to organise the proper use and care of the livestock and implements collectivised, on the basis that the collective property must be maintained in better condition than on the individual farms.
- (d) to adopt all measures necessary to improve the arable and pasture land and to increase the yield.
- (e) to adopt scientific breeding and veterinary measures in order to extend and improve cattle and poultry breeding for the market.
- (f) to develop all other branches of agricultural production in accordance with local conditions, as well as handicraft and homework production.
- (g) to undertake the erection of farm and communal buildings, as well as auxiliary undertakings, to be used on a co-operative basis.
- (h) to raise the cultural and political level of the members of the artel.
- (i) to use all available means to raise the standard of living of the members of the artel, and especially of the women and children.

V. Membership

9. Acceptance of new members into the artel is at the discretion of the management committee, which submits the list of newly admitted members to the next general meeting of the

artel for confirmation. Workers who are regularly employed away from the Collective farm are not bound to appear personally.

10. Membership of the artel is open to all actual toilers who have reached the age of 16 years. *Kulaks* and persons who have been deprived of the franchise are not admitted to the artel. Exceptions to this rule are, however, allowed in the case of members of families in which there are Red Army soldiers or Red Navy sailors, or village teachers of either sex who are loyal adherents of the Soviet State ; on condition that these give guarantees for their families. Peasants who before applying for admission to the Collective farm slaughter or sell their cattle or sell their implements and seed corn will not be accepted by the artel.

VI. Funds of the Artel

11. On joining the artel, each member must pay an entrance fee in money amounting to 2 to 10 per cent. of the value of his property, including both the collectivised and the non-collectivised parts of his farm, but not including objects of personal and household use. Should the chief source of income of the applicant for membership be wage labour (agricultural experts, teachers, surveyors, employees of Soviet or trading bodies within the area of the artel, etc.), the amount of the entrance fee must be determined by the management committee, but in no case may it exceed 10 per cent. of the annual income. The entrance fee for agricultural workers is fixed at not more than five roubles (10 shillings). Workers who are regularly employed outside of the Collective farm, in addition to the 2 to 10 per cent. entrance fee provided for above, pay a single contribution amounting to 3 per cent. of their annual wage. Apart from the entrance fee, worker members do not have to make any contributions from their wages to the artel. Payment of the entrance fee in instalments may be accepted by the management committee, in accordance with the regulations issued by the Union of Collective Farms.

12. The entrance fees form part of the indivisible fund of the artel.

13. Between a quarter and one-half (according to the strength of the artel) of the collectivised property—draught animals, milch cows, equipment, agricultural buildings, etc.—is set aside to form part of the indivisible fund of the artel. The remaining portion of the property is regarded as the separate share contribution of the members of the artel.

14. The management committee settles accounts with members leaving the artel, and returns to them their share contribution ; but land can only be returned from outside the area of the artel. The settlement of such accounts is made at the end of the agricultural year.

15. From the income of the artel recorded at the end of the agricultural year the working expenses of the Collective farm, and also the sums expended for the maintenance of those who are incapable of work, are to be deducted. Out of the balance, the amounts due for wages are to be paid and also contributions to special funds (from 10 to 30 per cent. to the indivisible fund, and from 5 to 15 per cent. into other common funds).

VII. Organisation and Remuneration of Labour

16. All work on the Collective farm is to be carried out by the personal labour of its members in accordance with rules for the allocation of work adopted by the general meeting of the artel. Only persons possessing special qualifications and having had special training (agricultural experts, technicians, engineers) may be employed by the artel for wages. The temporary use of hired labour is, however, permitted in exceptional cases when urgent work cannot be completed within the necessary time by the full use of all the available labour of the members of the artel ; hired labour may also be employed on building work.

17. The allocation of work within the artel is organised by the management committee on the basis of special rules. No

member of the artel may refuse to carry out the work allotted to him.

18. To facilitate the proper organisation of labour within the artel, standards of work and rates of payment (both time and piece) are to be laid down for various classes of work, specifying the amount and quality of the work to be carried out.

19. On the basis of this tariff, members of the artel are to be paid for work performed as follows : up to 50 per cent. of the sum standing to the credit of each member for work performed may be paid out, either in kind or in cash, in the course of the agricultural year, as an advance to meet the member's immediate requirements for food, etc. ; and the balance of the amount due for work is paid at the end of the agricultural year. Where members of the artel earn wages by work outside of the artel, not more than 10 per cent. of the sums earned is to be paid into the common fund of the artel, the amount to be fixed by the Union of Collective Farms.

20. The artel undertakes to maintain any of its members who are permanently or temporarily unfit to work. The conditions and the amounts of maintenance to be given are determined by the management committee (subject to confirmation by the general meeting of the artel) in accordance with the economic resources of the artel ; but they must not exceed the average rate of wages.

VIII. The Enforcement of Rules

21. All members of the artel undertake to observe the provisions of the statutes and the decisions of the general meeting and management committee ; to follow the rules for the division of labour, and to carry out the work allotted to them by the management committee and also all other obligations to the artel. Irresponsible and negligent handling of collectivised equipment and livestock will be regarded by the artel as treachery to the cause of collectivisation and as direct assistance to its enemies, the *kulaks*. Such irresponsible and

negligent handling of collectivised property, absence from work without adequate reason, and other violations of collective discipline, will be punished by the management committee by the imposition of penalties in accordance with special rules. (For example : a reprimand and warning ; temporary suspension from work ; fines ; etc.) The management committee may submit to the general meeting the question of expulsion from the artel in cases where members prove to be incorrigible.

IX. Business Management

22. The business of the artel is administered by the general meeting of members and by the management committee. In cases where the holding of a general meeting is difficult owing to the great number of members or the widely-scattered nature of the villages concerned, the general meeting may be substituted by a delegate meeting. Such delegates are to be elected by the members of the artel in the separate villages concerned.

23. The general meeting or delegate meeting is the supreme authority in all the affairs of the artel ; it decides all important questions, elects the management committee and the audit committee, and lays down instructions for their work. Fifty per cent. of the members, or of the delegates in the case of a delegate meeting, shall constitute a quorum. Decisions of the general meeting or delegate meeting shall be adopted by majority vote and by open ballot.

24. The management committee is elected for a year ; it is the executive body for administering the affairs of the artel. The management committee divides among its members the duties connected with the conduct of the affairs and production work of the artel, giving each member full responsibility for the work assigned to him and investing him with the necessary powers. The management committee is obliged to keep the accounts of the artel according to the methods and rules of the Collective farm organisation.

25. The audit committee supervises the activities of the management committee, and in particular enforces the observance by the management committee of the provisions of the statutes, the fulfilment of the plan of production, and the carrying out of contracts with and obligations towards the State ; it audits the accounts and records of property and stocks ; it expresses its views on the annual report of the management committee ; and it is responsible for its work to the general meeting or delegate meeting.

X. Relations to the Collective Farm System

26. The artel is a member of the Union of Collective Farms of . . . and works under its supervision.

27. On the basis of its plan of production, the artel enters into a contract with the Union of Collective Farms of . . . , by which it undertakes the organisation of agricultural production and the systematic delivery of marketable products to the State and Co-operative organisations ; while the Union of Collective Farms undertakes, with other State and Co-operative organisations, to supply the artel with means of production and articles of consumption and to arrange credit and organise agronomic aid for the artel.

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